Upper Pit River Watershed Integrated Regional Water Management Plan

Proposition 84 IRWM Grant Program Planning Grant

Prepared for
California Department of Water Resources
Division of Integrated Regional Water Management
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BACKGROUND

THE REGIONAL WATER MANAGEMENT GROUP

The Pit River Watershed Alliance (PRWA) submitted an application to DWR during the Region Approval Process (RAP) in 2009. As a result, the Upper Pit River Watershed area was formally identified as an IRWMP region, and the PRWA was identified as the initial RWMG.

The PRWA has extensive experience in working together and developing watershed-level planning documents. The group was formed in 1999 and currently includes 27 members (see Table 2-1). They recently completed a Watershed Management Strategy (WMS) for the Upper Pit River watershed and have also prepared watershed assessment documents for Hat Creek, Burney Creek, and Fall River watersheds (published in 2010).

PRWA members are signatories to a Memorandum of Understanding (MOU), which formalizes their relationship and decision-making processes. Thus, it will be evaluated as a possible governance structure for the IRWMP development process.

As described in Task 2, Outreach, Collaboration, and Coordination, a key activity in the planning grant work plan is the involvement of additional stakeholders within the region. An array of stakeholders will be contacted and invited to participate in IRWMP activities and to become members of the RWMG. Thus, the final composition of the RWMG is not yet known. At a minimum, the group will include the existing PRWA signatories and at least two organizations with statutory authority over water (as required by DWR). The RWMG inclusion of new members into the governance structure is described further in Task 2 of the work plan, below.

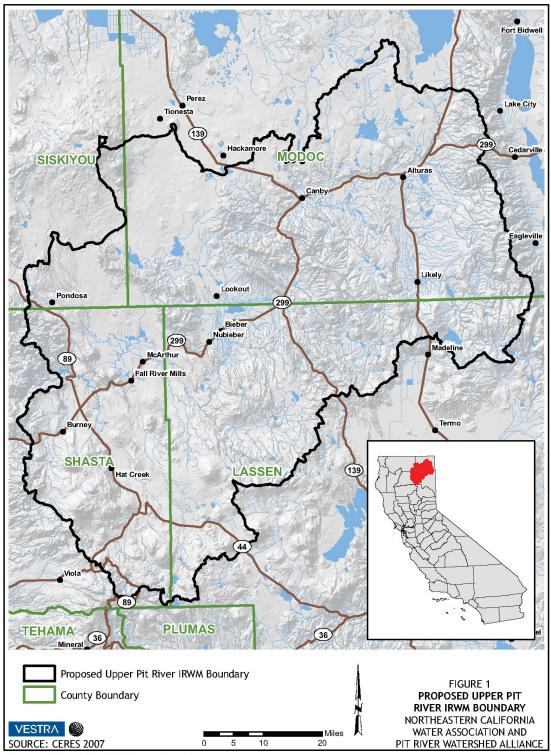
THE REGION

The Upper Pit River Watershed IRWMP (Upper Pit) boundary was initially identified by the PRWA during regularly held meetings and discussions with NECWA Board members. The boundary represents an area that has similar resource issues, and where community members live and work. The boundary was revised slightly by DWR during the RAP. A map showing the boundary, as approved by DWR, is included below (see Figure i-1).

Two minor overlapping areas with an adjacent proposed region are currently known. The Upper Sacramento/McCloud region has two areas in eastern Siskiyou County that overlap with an area believed to contribute subsurface water to the Upper Pit River region. This is a lava plain area that is very flat and has virtually no surface flow. Another overlap occurs in the southeastern corner of Siskiyou County. The uppermost watershed area of Bear Creek (the only significant surface flow stream for the Fall River sub-watershed) enters into Siskiyou County.

THE IRWMP

Since 2004, five significant watershed management documents have been developed by the PRWA, with consulting assistance from Vestra Resources, Inc (Vestra). The watershed management documents—the Pit River Watershed Assessment (2004), the Upper Pit River Watershed Management Strategy (2010), the Hat Creek Watershed Assessment and Watershed Management Plan (2010), the Burney Creek Watershed Assessment and Watershed Management Plan (2010), and the Fall River Watershed Assessment and Watershed Management Plan (2010)—will provide extensive background data for use in developing the IRWMP.



P:\GIS\200919\Figures\200919_Figure1_ProposedBoundary.mxd

Figure i-I
Upper Pit River IRWM Boundary

The Upper Pit River Watershed Management Strategy (2010) outlines the goals, management objectives, existing conditions and assessment conclusions, management strategies, and management actions for ecosystem improvements for the Upper Pit River Watershed. The strategy discusses primary issues and concerns and provides management recommendations for projects. Because such a large portion of the watershed is privately owned, participation and support from private stakeholders was crucial to development of the strategy document.

This document, along with the other four watershed management documents discussed above, will form the basis for the region description portion of the document and have already influenced the development of the work plan for the rest of the document.

The work plan in this planning grant application describes a process for developing a meaningful and durable IRWMP document.

IDENTIFYING STAKEHOLDERS

As discussed in Task 2 of the work plan, Outreach, Collaboration and Coordination, the current membership of the PRWA is diverse, but it does not fully represent the stakeholders in the region. The PRWA performed many outreach activities during the development of the watershed management documents discussed above, as well as the RAP document. In this way, additional stakeholders who should be included in the IRWMP process have already been identified, including specific constituencies such as disadvantaged communities, tribes, counties, and others. A regional scale outreach and communication strategy has been intentionally designed to ensure that as many stakeholders as possible are contacted and also to ensure maximum participation of those stakeholders. This strategy is described in detail in Task 2 of the work plan.

DISADVANTAGED COMMUNITIES (DAC)

A Census-based survey of all of the zip codes in the Upper Pit IRWMP Region was completed as part of the development of this application. This survey indicated that 27 of the 29 communities (as identified by their zip codes) in the region (or 93 percent) can be characterized as DACs. In addition, 13 of these 27 communities (48 percent) meet the criteria for severely disadvantaged communities. Organizations within the existing PRWA membership represent a portion of these communities. However, the majority of the disadvantaged and severely disadvantaged communities currently do not have any formal representation within the initial RWMG.

Outreach to the identified DACs will begin prior to grant agreement and will be ongoing throughout the planning grant activities, following funding by DWR. In addition, local tribes (an environmental justice consideration) have been actively recruited into the PRWA and are currently active members. However, these tribal representatives have indicated that additional outreach to other tribal groups will serve to enhance the breadth of representation of tribal entities within the region. These outreach activities are described in further detail in Task 2 of the work plan.

TABLE i-I
DAC STATUS OF COMMUNITIES IN THE UPPER PIT RIVER WATERSHED IRWM REGION

DAG	SDAC:	NON-BAC
DACs †	SDACs‡	NON-DACs
Montgomery Creek	Termo	 Davis Creek
Alturas	 Madeline 	 Cassel
Bieber	Likely	
Little Valley	 Nubieber 	
McArthur	 Horse Creek 	
Hat Creek	 Tennant 	
Burney	 New Pine Creek 	
McCloud	 Big Bend 	
Fall River Mills	 Old Station 	
Surprise Valley	 Lookout 	
Adin	 Tulelake 	
Canby		
Viola		
Round Mountain		
Davis Creek		
Cassel		

[†] Disadvantaged Community (DAC) is defined as a community with an annual median household income that is less than 80 percent of the statewide average annual median household income.

WATER-RELATED OBJECTIVES AND CONFLICTS

Many of the primary concerns in the Upper Pit River IRWMP Region have already been identified, including a shortage of water during summer, water quality issues, hydrology concerns related to the disconnection of streams from floodplains, juniper encroachment, and the protection of property and water rights. There is also a lack of information regarding groundwater resources.

While these concerns are known, there is not currently a single source of information that clearly describes the region's water management issues and the conflicts associated with those issues. In general, conflicts concerning water use are resolved by the individuals in disagreement rather than using the judicial system to reach resolution. In the past, resolution has been reached through a variety of methods, and this planning grant application does not advocate exclusion of these methods. Instead, Task 4, Water-Related Issues and Conflicts, and Task 8, Objectives, describe strategies for identifying water-related objectives and conflicts, and addressing or resolving conflicts, as appropriate and/or necessary.

Current RWMG members have clearly articulated their desire to thoroughly address and, where possible, resolve water-related conflicts within the region. In fact, the topic of issue and conflict resolution was deemed so important to the plan that a separate IRWMP section, entitled "Water-Related Issues and Conflicts" is specifically included in the work plan (See Task 4). Although the plan standards suggest that water conflicts and issues be addressed as part of the region description, it has been determined that creating a separate chapter and implementing a structured conflict resolution process as part of IRWMP preparation would be extremely beneficial to stakeholders in the region.

[‡] Severely Disadvantaged Community (SDAC) is defined as a community with an annual median household income that is less than 60 percent of the statewide average annual median household income.

Early in the IRWMP development process, members of the Blackfoot Challenge will be brought to the region. This group is a nationally acclaimed watershed collaborative in western Montana that faces issues similar to those in the Upper Pit IRWMP region. This group will inform the RWMG and other stakeholder constituencies of the specific strategies that they have used to achieve significant and durable solutions to shared water management and land stewardship issues.

DETERMINING CRITERIA FOR DEVELOPING REGIONAL PRIORITIES

The Upper Pit River Watershed Management Strategy document identified nine goals and a number of management objectives for these goals. This collaboratively developed document addressed many, but not all, of the considerations identified in the Prop 84 IRWM Grant Program Guidelines. The PRWA has evaluated the plan standards and the watershed management document in order to develop a systematic process for prioritizing identified resource management issues and conflicts. This process is described in detail in Task 5.

DATA MANAGEMENT AND TECHNICAL ANALYSIS

Federal, state, and local agencies within the IRWMP region have developed, and will continue to develop, a substantial amount of data characterizing the natural resource and management issues of the region. Most, if not all, of this data has either been peer reviewed, made subject to extensive public comment and revision, or prepared by technical advisory or support committees. These data are currently housed in various agencies and organizations across the region, and there is no central clearinghouse or data list currently available. A specific strategy has been identified for collecting data, developing data collection protocols and procedures, making data available across the region, and ensuring that a complete list of available data is provided to all RWMG members and stakeholders. See Tasks 11 and 14, respectively, for more details on the topics of data management and technical analysis.

RESOURCE MANAGEMENT STRATEGIES

The integration of resource management strategies, resource management agencies and entities, and project development is a key component of the work effort. The work plan is specifically configured to ensure that stakeholder interests are viewed from a regional and integrated perspective, that resource management strategies are integrated both within and between agencies (federal, state, and local), and across issues (water quality, water supply, environmental stewardship). The project development tasks (see Task 9) in the work plan are specifically structured to ensure that projects included in the plan integrate multiple stakeholders, objectives, and issues or locations.

IRWMP IMPLEMENTATION AND IMPACTS AND BENEFITS

Implementation of the IRWMP, and the impacts and benefits associated with this implementation, will be addressed in several sections of the completed document, including the plan performance and monitoring section and the impacts and benefits section. These sections will describe the measures by which the plan will be implemented and its performance monitored, as well as the program and project-level impacts and benefits that could result. See Tasks 13 of the work plan for more information regarding the development of these sections.

IRWM PLAN STANDARDS

The process described in this planning grant proposal will result in completed IRWMP document for the Upper Pit River Watershed Region. The preparation of this planning grant proposal required a focused and thorough review of the plan standards presented in the Prop 84 IRWM Grant Program Guidelines. This review was the foundation for the work plan included in this proposal. The plan standards will continue to be revisited throughout the preparation of the IRWMP to ensure that all requirements are met and/or addressed in the final document.

INTRODUCTION

The work plan for preparing the Upper Pit River Watershed IRWMP has been developed with two primary goals: ensuring compliance with the published plan standards and meeting the needs and interests of the region itself.

The PRWA designated a subcommittee to collaborate on preparation of the planning grant application. This group met four times and collaborated with the lead consultant to progressively refine the grant application. The group identified and recruited both the project applicant, NECWA, and the project fiscal agent, North Cal-Neva RC&D. The Planning Grant Proposal Development Committee members included Henry Giacomini (NECWA), Edie Asrow (retired Modoc National Forest), Marty Yamagiwa (Modoc National Forest), Todd Sloat (watershed coordinator for PRWA), Mark Steffek (North Cal-Neva RC&D), and Dennis Heiman (State Water Resources Control Board).

The Planning Grant Proposal Development Committee has articulated a group of topics that will be of particular importance during preparation of the plan. These topics are described below.

PIT RIVER WATERSHED ALLIANCE (PRWA) BACKGROUND

The PRWA will form the initial membership of the Regional Water Management Group (RWMG). The 27 existing members of the PRWA have been meeting as a group since December 1999. The group has a long and successful history of producing significant assessment and management documents for the region. The IRWM process will result in the recruitment of new stakeholders. The process of integrating new members into an established, long-term group will be carefully managed to ensure that new members are properly oriented and readily accepted into the group. The need to invigorate the group process following the production of a variety of long and complex documents has been identified. With this in mind, the work plan has been structured to minimize the number of meetings, focus the work effort, and ensure maximum participation of members through the 18-month process.

DISADVANTAGED COMMUNITIES

Virtually all of the communities within the plan area meet the criteria for disadvantaged status. Additionally, nearly half of the communities within the region meet the criteria for severely disadvantaged. As a result, such issues as travel time, mileage expense, scheduling of meetings during non-working hours, and other similar factors had a direct bearing on the structure of the work plan. Again, meetings have been scheduled to reduce travel time and complexity, to ensure local input on local issues, and to maximize the capacity of disadvantaged communities and individuals to participate in the planning process.

WATER MANAGEMENT AGENCIES

There are II agencies or organizations with statutory authority over water within the region. Of these entities, two are irrigation districts (Hot Springs Irrigation District and South Fork Irrigation District). Two of the II agencies with statutory authority have been involved in PRWA activities (NECWA and DWR). Other agencies with statutory authority have not yet been extensively involved in PRWA because the bulk of area residents rely on groundwater for domestic consumption. Further, the water rights in the basin have been adjudicated and FERC licensing processes completed nearly a decade ago further confine the flexibility of water management in the region. The involvement of agencies with statutory authority over water is recognized as an essential element of the IRWMP process. These have been identified as a key constituency and will be contacted and brought into the IRWMP development activities at the very beginning of the process (see Task 2, Outreach, Collaboration, and Coordination, for more information).

ORGANIZATION OF THE PROPOSAL

The plan standards, as presented by the Department of Water Resources (DWR), will necessarily guide the overall work plan. However, the sequence and manner in which the standards are discussed in this work plan differs from

the order in which they appear in the Prop 84 IRWM Grant Program Guidelines. This change in sequence is intentional and represents the order in which the plan standards will be addressed in the IRWMP document itself. As an example, the Local Land Use Planning and Local Water Planning standards will be addressed in one section of the IRWMP, rather than two (see Task 6, Local Water and Land Use Planning Coordination, in the work plan for more details).

Table I-I, Order of Plan Standards, below presents the order of the standards in the guidelines and how those standards will appear within the Upper Pit River Watershed IRWMP (i.e., the IRWMP Table of Contents).

PROCESS FOR REVIEW OF IRWMP CHAPTERS

A standardized process for reviewing completed IRWMP sections has been identified. Rather than repeat the entire process in its entirety throughout the work plan, the following paragraphs will be summarized at the end of each task's "overview" section (directly beneath the task title). Task 16, Prepare IRWMP Document, provides further details on the review, revision, and adoption process.

Upon completion of the draft IRWMP chapter by the consulting team or the RWMG members, the Coordinating Committee (CC) will review the document in detail. As shown in the schedule, the CC will review the sections in an iterative manner in a sequence that is consistent with the products of each task. Following the review by the CC, the consulting team will revise the document to reflect all of the comments received. The review process will be managed to ensure that the consulting team receives a single set of comments from the CC. The revised draft will be submitted to the RWMG for review and comment.

The RWMG review of the draft section will be two-fold. First, members will be encouraged to attend a comment session so that the consulting team and CC can hear directly from individual members and constituencies. Second, members will submit written comments and suggested revisions via email or hard copy. This phased comment strategy has proven to reduce the complexity and conflicting input received when only written comments are solicited. Following receipt of all oral and written comments, the consulting team will revise the draft IRWMP chapter and create a final review draft. Lastly, the consulting team will submit the final section to the RWMG for their final approval and adoption.

Table i -2 Order of Plan Standards

Order of Flan Standards		
DWR TOPICAL ORDER IN	LOCATION IN PLANNING GRANT WORK	
GUIDELINES	PLAN	
Governance	Task 15.1: Governance During IRWMP Implementation	
Region Description	Task 3: Region Description/Resource Integration	
Objectives	Task 8: Objectives	
Resource Management Strategies (RMS)	Task 5: Resource Management Strategies	
Integration	Task 3: Region Description/Resource Integration; Task 9:	
	Project Development and Integration	
Project Review Process	Task 9.4: Develop Project Review Process	
Impact and Benefits	Task 13: Impacts and Benefits	
Plan Performance and Monitoring	Task 10: Plan Performance and Monitoring	
Data Management	Task II: Data Management	
Finance	Task 12: Finance	
Technical Analysis	Task 14: Technical Analysis	
Relation to Local Water Planning	Task 6: Local Water and Land Use Planning Coordination	
Relation to Local Land Use Planning	Task 6: Local Water and Land Use Planning Coordination	
Stakeholder Involvement	Task 2: Outreach, Collaboration, and Coordination	
Coordination	Task 2: Outreach, Collaboration, and Coordination	
Climate Change	Task 7: Climate Change	
Program Preferences	Task 9: Project Development and Integration	
State-Wide Priorities	Task 9: Project Development and Integration	

WORK PLAN

The following tasks, taken together, represent the work plan for the Upper Pit River Watershed IRWMP document preparation.

TASK I ADMINISTRATION

OVERVIEW: The Northeastern California Water Association (NECWA) will be the applicant and the North Cal-Neva Resource Conservation and Development Council (RC&D) will be the fiscal agent for the Upper Pit River Watershed IRWMP project. NECWA has selected a lead consultant to assist in preparation of the IRWMP. The consulting team has extensive experience in all aspects of IRWMP contracting, invoicing, process, design, implementation, and preparation of IRWM compliant documents. The consulting team, in direct consultation with NECWA, will hire and supervise a regional coordinator to provide local project support and administrative services as required, including acting as liaison with the RC&D. This regional coordinator will also serve as the local liaison and coordinator for the IRWMP development. The consulting team will provide a high level of initial support to the regional coordinator while the individual becomes oriented and management systems are established. This level of support will diminish once the training cycle for the regional coordinator is completed.

TASK I ADMINISTRATION

GOAL OF TASK

Ensure that the contract is administered appropriately and accurately with all invoicing, reporting, and management compliant with the IRWMP Plan Standards.

KEY DELIVERABLES

- Negotiated and signed contract between DWR and NECWA
- Contract between NECWA and fiscal agent
- Negotiated and signed contract between NECWA and lead consultant
- Policies, procedures, and systems to support contract management and reporting

SUBTASKS

- I.I Negotiate Contract with DWR
- 1.2 Establish Project and Financial Management Policies, Procedures, and Systems
- 1.3 Develop and Negotiate Contracts with Consultants
- 1.4 Establish DWR-Compliant Invoicing Policies, Procedures, and Systems
- 1.5 Overall Contract Management
- 1.6 Management of Project Team by Consultant

BUDGET

Total Funds Requested: \$88,240

Match: \$4,400

Match Source: NECWA

I.I NEGOTIATE CONTRACT WITH DWR (NECWA)

The consulting team will serve as support to NECWA during the contract development process. While the NECWA Board will be closely involved, the consulting team's breadth of experience with Prop 50 contract negotiations will provide important technical support during the process. Once the contract has been successfully negotiated and executed, the regional coordinator will assume responsibility for regular invoicing and reporting (see Task 1.4).

1.2 ESTABLISH PROJECT AND FINANCIAL MANAGEMENT POLICIES, PROCEDURES, AND SYSTEMS (NORTH CAL-NEVA RC&D AND NECWA)

North Cal-Neva RC&D (RC&D) was incorporated on February 21, 1997. Since that time, the RC&D has administered funds totaling roughly \$1,243.000. Members of the PRWA have managed large-scale, Prop 50-funded projects in the past, under the auspices of the RC&D, totaling \$810,000.

NECWA, in consultation with the RC&D, the consulting team, and the regional coordinator, will collaborate to evaluate existing administrative support systems and, as needed, reconfigure the system of policies, procedures, and supporting systems to enable NECWA and the RC&D to successfully manage the project, from a financial management and scope compliance perspective.

The NECWA Board will retain overall responsibility for, and oversight of, the contract. The Coordinating Committee (CC) under the auspices of the RWMG (see Task 2.2.1, Committees in Support of IRWMP Development Process, for more information regarding the CC) will bear primary responsibility for ensuring that all project deliverables are technically accurate and consistent with DWR guidelines. The consulting team's project manager, therefore, will report to the CC on elements and/or tasks that relate directly to plan preparation and will report directly to the NECWA Board on overall compliance with the DWR contract (e.g., invoicing, budget status, reporting, etc). The CC members and responsibilities will be confirmed at the initial region-wide RWMG meeting (Task 2.2.3).

1.3 DEVELOP AND NEGOTIATE CONTRACTS WITH CONSULTANT

NECWA will develop an agreement with the consultant that encompasses all of the work identified in the work plan and budget, including the use of sub-consultants to provide specialized services. In turn, the lead consulting team will develop and negotiate contracts with each sub-consultant utilizing the work plan, schedule, budget, and deliverables identified in the primary contract with DWR. The contracts will include stipulations covering insurance, labor compliance, and other requirements compatible with the primary DWR contract. The consultant will negotiate the contract with NECWA concurrently with NECWA's negotiation of the grant agreement with DWR.

1.4 ESTABLISH DWR-COMPLIANT INVOICING POLICIES, PROCEDURES, AND SYSTEMS (NORTH CAL-NEVA RC&D)

Following completion of Task 1.2, above, the regional coordinator and the RC&D, with the technical support of the consulting team, will establish templates, electronic and paper filing systems, procedures, and systems for accurate and regular provision of both progress reports and invoices to DWR. These systems will be evaluated prior to submittal of the initial invoice to ensure accuracy, reliability, and consistent documentation. The project will be billed monthly.

1.5 OVERALL CONTRACT MANAGEMENT

NECWA will delegate direct oversight of the IRWMP preparation to the RWMG, who will, in turn, select a Coordinating Committee (CC) made up of stakeholders from across the region. The NECWA Board will retain overall responsibility for and oversight of the contract. The RC&D will serve as fiscal agent for the project. This task describes the general, high-level communication between the two entities. See Tasks 1.1 and 1.4 for a description of the day-to-day management of IRWMP development.

A component of overall contract management will include management of the consultant by NECWA. NECWA and the consulting team have already established a sound relationship. All aspects of contract management have been thoroughly discussed. The consulting team will meet with the NECWA Board each quarter, at minimum, to report to the Board on the overall contract status, budget, and deliverables. In addition, the NECWA Board will

be provided with monthly updates, which will also serve as the basis for DWR invoicing for the consulting team and their sub-consultants. In this way, the impact of invoice preparation on the regional coordinator will be minimized and the ability of the NECWA Board to track project activities on a monthly basis will be ensured.

1.6 MANAGEMENT OF PROJECT TEAM BY THE CONSULTANT

The consultant will take primary responsibility for contract negotiation and oversight and administration of the various sub-consultants who will be working on a variety of deliverables in support of plan preparation. The consultant will require monthly invoice and progress reports from all of the sub-consultants. The required format for these materials will support development of an aggregated invoice to the RC&D, which will in turn serve as the basis for the RC&D invoice to DWR. At minimum, quarterly reports will be made to the NECWA Board, presenting the status of project elements, summary of invoicing, and the overall relationship of identified deliverables and their percent complete with the percent spent identified in the reports. Thus, the consulting team's management of their staff and consultants will be accomplished in a way that directly supports monthly reporting and invoicing to DWR by NECWA and the RC&D. The lead consultant will negotiate contracts with all identified sub-consultants concurrently with negotiation of the NECWA/consultant master contract.

TASK 2 OUTREACH, COLLABORATION, AND COORDINATION

OVERVIEW: The Pit River Watershed Alliance (PRWA), which is the initial Regional Water Management Group (RWMG) for the Upper Pit River Watershed IRWM Program, was formed in December 1999. Since that time, the PRWA has developed extensive information concerning the management and condition of watersheds in the region, as well as developing collaborative management strategies to address identified issues and needs. In 2002, the PRWA was awarded a grant, entitled the Pit River Watershed Alliance Watershed Management Program, to prepare an assessment of the Upper Pit River Watershed. Additional watershed assessments were prepared for Hat Creek, Burney Creek, and Fall River watersheds (published in 2010). As a result of the previous extensive stakeholder outreach associated with these projects, the PRWA currently includes 27 members who are signatories to a Memorandum of Understanding (MOU) formalizing their relationship and participation. The PRWA submitted a Region Acceptance Process (RAP) application, and was subsequently approved by DWR in 2009 as part of the first RAP cycle.

TABLES

TABLE 2-1		
PIT RIVER WATERSHED ALLIANCE MEMBERS - 2010		
North Cal-Neva RC&D	Modoc National Wildlife Refuge	
Central Modoc Resource Conservation District	Modoc County Farm Bureau	
Big Valley Water Users Group	Natural Resource Conservation Service	
Cal Trout	Pit Resource Conservation District	
California Waterfowl Association	Shasta County Farm Bureau	
Regional Water Quality Control Board	Sierra Pacific Industries	
Department of Water Resources	Modoc County Board of Supervisors	
Fall River Resource Conservation District	Lassen County Board of Supervisors	
Lassen County Farm Bureau	Alturas Wastewater Treatment Plant	
Northeastern California Water Association	Sacramento River Watershed Program	
Fall River Wild Rice Association	California Dept. of Fish and Game	
High Mountain Hay Growers	Bureau of Land Management	
Modoc National Forest	Modoc County Dept. of Public Works & Planning	
Modoc County Noxious Weed Management Group		

As discussed in the background, introduction, and Task I above, a Coordinating Committee (CC) will manage the day-to-day processes associated with plan preparation, development of the IRWMP document, and the consulting team's plan-related work effort. Together, the background and introduction section in conjunction with Task I, Administration, further clarify the management responsibilities of NECWA, the RC&D, the consulting team, CC, and RWMG.

In the aggregate, this task addresses local, regional, inter-IRWMP, and agency coordination identified in the IRWMP Plan Standards. Task 2.1, Stakeholder Involvement during IRWMP Development, and Task 2.2, IRWMP Development Process, will result in local coordination by bringing together diverse agencies and stakeholders to identify issues of local conflict and how to best minimize, avoid, or resolve these conflicts. Task 2.3, Interregional Coordination with Neighboring IRWMPs, addresses interregional coordination while Task 2.4, DWR Sacramento River Funding Area Work Group, identifies an inter-IRWMP coordination strategy. Task 2.5, Develop Process and Procedure for Coordinating Federal, State, and Local Agencies, considers a strategy for agency coordination. Task 4 includes a description of specific measures to address water management conflicts identified in the region.

Following completion of the subtasks described below, the consultant will complete an initial draft of the outreach, collaboration, and coordination chapter. The chapter will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 2 OUTREACH, COLLABORATION, AND COORDINATION

GOALS OF TASK

- 1. Identify and recruit additional stakeholder participation to support IRWMP preparation
- 2. Develop a comprehensive and productive committee and subcommittee structure to support compliance with IRWMP Plan Standards on a section by section basis
- 3. Ensure intra- and inter-regional and agency coordination
- 4. Broaden stakeholder involvement in IRWMP process with particular focus on disadvantaged communities and underrepresented interests

KEY DELIVERABLES

- Contact and outreach strategy for recruiting additional stakeholders
- Identification of geographic sub regions and subcommittees within the plan area
- Identification of capacity building needs of the region's DACs
- Development of a tribal outreach program
- Integrated communication strategy
- Creation of web portal
- Creation of a decision making structure to support plan development
- DAC and EJ stakeholder recruitment program and activities
- Creation of IRWMP computer work station in local libraries
- Specific processes for coordination with other IRWMPs and federal, state, and local agencies
- Outreach, collaboration, and coordination chapter in IRWMP

SUBTASKS

- 2.1 Stakeholder Involvement During IRWMP Development
 - 2.1.1 Identify Additional Stakeholders
 - 2.1.2 Recruit Participation of Additional Stakeholders
 - 2.1.3 Disadvantaged Communities (DAC) and Environmental Justice (EJ) Outreach
 - 2.1.4 Financial Assistance for Disadvantaged Participants
 - 2.1.5 Implement Communication Strategy
 - 2.1.6 Design, Launch, and Ongoing Updates to IRWMP Website
 - 2.1.7 Public Involvement
- 2.2 IRWMP Development Process
 - 2.2.1 Committees in Support of IRWMP Development Process
 - 2.2.2 Prepare Materials to Support Initial Region-Wide RWMG Meeting
 - 2.2.3 Conduct Initial Region-Wide RWMG Meeting
- 2.3 Interregional Coordination with Neighboring and Regional IRWMPs
 - 2.3.1 Kick-Off Meeting for Interregional Coordination
 - 2.3.2 Conduct Two Additional Regional Workshops
 - 2.3.3 Ongoing Support of Regional Workshops
 - 2.3.4 IRWMP-Specific Development of Plan Language
- 2.4 DWR Sacramento Area Work Group
- 2.4 Develop Process and Procedures for Coordinating Federal, State, and Local Agencies

BUDGET

Total Funds Requested: \$249,152

Match: \$141,720

Match Source: RWMG members and consultant

2.1 STAKEHOLDER INVOLVEMENT DURING IRWMP DEVELOPMENT

Despite the diverse membership currently within the PRWA, additional outreach will be conducted to ensure that the IRWMP preparation process will maximize integrated planning on a regional scale. Also, the need to sustain the open stakeholder-outreach process was identified during the RAP; therefore, a specific focus of this task will be to institute effective processes to inform and engage citizens, organizations, agencies and institutions of the region throughout the IRWM planning process and the preparation of the IRWMP.

2.1.1 IDENTIFY ADDITIONAL STAKEHOLDERS

In addition to the expanded outreach to the general public, the PRWA has also identified specific constituencies who would be especially important during IRWMP preparation and implementation. They include, but are not limited to, Lassen, Siskiyou, Modoc, and Shasta County governments; Pacific Gas & Electric (PG&E); agencies with statutory authority over water (including Hot Springs Irrigation District, South Fork Irrigation District, Lassen-Modoc Flood Control and Water Conservation District, City of Alturas, Modoc County Watermaster Department, and Lassen County Watermaster Department); disadvantaged communities (DAC); local Native American tribes; community organizations; and self-supplied water users. Additionally, specific targeted constituencies have already been identified as needing further contact and recruitment: agriculturalists, environmental groups, unincorporated communities, and tribal members.

As mentioned in the background and introduction sections above, the consulting team will work with CC members to develop a detailed list for outreach efforts. The list will include individuals from each of the constituencies listed above, as well as others identified during this process. The CC will consult with the existing RWMG members to augment the list of stakeholders to be contacted. Particular attention will be placed on constituencies that do not currently participate in the PRWA.

During the initial stakeholder outreach effort, the regional coordinator, utilizing forms and templates developed in conjunction with the consulting team and the CC will systematically interview each existing and potential RWMG member to gather data concerning their organization (e.g., mission, annual budget, membership, project implementation history, data collection methodology, organizational bibliography, etc).

2.1.2 RECRUIT PARTICIPATION OF ADDITIONAL STAKEHOLDERS

Local experience has confirmed that outreach is most effective when conducted within an existing social fabric or network. With this in mind, three locally based contact people have been identified for outreach to the various targeted constituencies. A contact and outreach strategy will be developed by the CC prior to initial contacts and will likely consist of direct contact via phone, followed by individual meetings with targeted constituents. The strategy will also include identification of specific geographic sub-regions within the plan area that will serve as a basis for all plan-related geo-specific outreach.

Prior to the first formal RWMG meeting (see Task 2.2.3), a preliminary outreach cycle will be accomplished by conducting a meeting in each pre-identified geographic sub-region. Experience elsewhere in the state has shown that participation will increase if travel time to meetings is reduced. Therefore, utilizing these local place-based meetings and activities to commence the process will ensure substantive input at the initial RWMG meeting. These preliminary meetings will serve to assess the level of interest within each sub-region for RWMG participation, acquaint them with the overall IRWMP process, identify initial process and content issues, and support agenda and material preparation for the initial RWMG meeting. Finally, each sub-region's interest in creating a sustained regional subgroup structure will be assessed.

2.1.3 DISADVANTAGED COMMUNITIES (DAC) AND ENVIRONMENTAL JUSTICE (EJ) OUTREACH

As part of the stakeholder outreach effort, particular attention will be paid to identifying and contacting DACs. In anticipation of this task, the consulting team has conducted a preliminary evaluation of Census data (see Table 2-2).

The counties within the IRWM region have already been identified as meeting the DAC criteria. The evaluation indicated that 97 percent of the communities within the region are disadvantaged (Median Household Income, MHI, is less than 80 percent of the state MHI) and 43 percent of the DACs in the region meet the requirements for designation as severely disadvantaged (less than or equal to 60 percent of the statewide MHI). As a result of this research, individuals within the identified communities will be contacted to determine their capacity and willingness to participate in IRWMP development.

Finally, as a result of this DAC-outreach effort, the capacity-building needs of the region's DACs will be identified. A matrix tabulating the capacities of the various DACs will be compiled and will serve as a basis for the creation of a systematic capacity-building program to be implemented throughout IRWMP preparation. The focus of this program will be to ensure that the DAC communities can fully participate in plan implementation, especially project development. The DAC capacity-building program will likely consist of the provision of templates, simple workbooks, sample process design frameworks, targeted training, process facilitation, skills building, budget development, and other similar elements. This information will also be used to assist the RWMG in determining whether satellite RWMG meetings or place-based sub-region groups might be the most efficient and effective way to ensure involvement of DACs over the long term.

An Environmental Justice program will also be developed in the early stages of this task. The program will include identification of targeted ethnic and socioeconomic groups, utilizing available Census data.

Preliminary discussions with Native American groups in the region have already begun. Additionally, the consulting team has had success in developing projects with non-federally recognized tribal entities. The regional coordinator and identified RWMG members will work with the tribes to determine their desired level of involvement in the process. The creation of a tribal sub-group, integration of tribal members into sub-regional work groups, identification of a tribal liaison, and participation in the RWMG will be explored. The DAC outreach will directly address issues associated with Environmental Justice and socioeconomic status.

TABLE 2-2

DAC STATUS OF COMMUNITIES IN THE UPPER PIT RIVER WATERSHED IRWMP

ZIP CODE	CITY	COUNTY	MEDIAN HOUSEHOLD INCOME (MHI)	POPULATION	DAC STATUS†
96006	Adin	Modoc	\$ 32,250	599	DAC
96101	Alturas	Modoc	\$ 27,942	5,092	DAC
96009	Bieber	Lassen	\$ 28,611	579	DAC
96011	Big Bend	Shasta	\$ 23,250	260	SDAC
96013	Burney	Shasta	\$ 30,882	4,536	DAC
96015	Canby	Modoc	\$ 32,917	403	DAC
96016	Cassel	Shasta	\$ 50,000	326	
96108	Davis Creek	Modoc	\$ 44,722	91	
96028	Fall River Mills	Shasta	\$ 31,797	1,901	DAC
96040	Hat Creek	Shasta	\$ 30,469	392	DAC
96050	Horse Creek	Siskiyou	\$ 22,083	467	SDAC
96116	Likely	Modoc	\$ 14,722	257	SDAC
96056	Little Valley	Lassen	\$ 28,750	1,546	DAC
96054	Lookout	Modoc	\$ 24,250	367	SDAC
96119	Madeline	Lassen	\$ 14,583	70	SDAC
96056	McArthur	Lassen	\$ 28,750	1,546	DAC
96057	McCloud	Siskiyou	\$ 31,331	1,582	DAC
96065	Montgomery Creek	Shasta	\$ 27,692	417	DAC
97635	New Pine Creek	Modoc	\$ 22,500	348	SDAC
96068	Nubieber	Lassen	\$ 15,938	220	SDAC
96071	Old Station	Shasta	\$ 24,219	169	SDAC
96084	Round Mountain	Shasta	\$ 34,375	442	DAC
96104	Surprise Valley	Modoc	\$ 32,159	849	DAC
96058	Tennant	Siskiyou	\$ 22,266	811	SDAC
96132	Termo	Lassen	\$ 12,917	61	SDAC
96134	Tulelake	Modoc	\$ 27,383	2,586	SDAC
96088	Viola	Shasta	\$ 33,675	4,215	DAC

Table Summary: 25 of the 27 communities (92%) meet the DAC criteria. II of the 27 communities (40%) meet the SDAC criteria

[†] DAC is defined as a community with an annual median household income that is less than 80 percent of the statewide average annual media household income. SDAC is defined as a community with an annual median household income that is less than 60 percent of the statewide average annual media household income.

2.1.4 FINANCIAL ASSISTANCE FOR DISADVANTAGED PARTICIPANTS

The financial assistance strategy to encourage and enable participation by both disadvantaged individuals and communities across the region has two primary elements: I) Direct stipends to cover otherwise unaffordable costs for individuals and organizations and 2) enhancing and expanding the capacity of the largely volunteer-run and contribution-funded libraries in the region, which serve both as social gathering places and knowledge/information centers.

In IRWMP regions across the state, stipends are successfully used to enable participation by specific constituencies such as DACs, small agencies whose budgets have been greatly affected by the recent recession, and non-profits with limited funds. This strategy will also be used in the Upper Pit River Watershed region, and a stipend budget has been prepared and is included in the overall IRWMP project budget. The stipend budget will be administered by the CC to ensure that the maximum number of individuals, organizations, and agencies that need assistance are able to utilize the stipend funds.

Expected categories for stipends include travel time, mileage, daycare, meeting participation, materials (document acquisition), phone, per diem, and copying. All meetings that are longer than four hours will include a meal.

There are 17 libraries that currently serve the region. Each of these libraries serves as a community gathering point, as well as an access point for computer and Internet service. In this way, libraries provide a venue for individuals to access, track, and interact with the IRWMP preparation process via the Internet. Conversations with each of the libraries indicate that a severe shortage of computer terminals has and will continue to hamper their capacity to serve multiple individuals concurrently. In order to respond to the needs of these local libraries, a systematic assessment of the libraries will be undertaken to identify which facilities would most benefit from the ten computers currently included in the project budget. This evaluation will include an assessment of each institution's individual capacity to support an internet connection and computer-related costs (e.g., print cartridges and repairs) over time. Preliminary conversations with computer vendors indicate that a discounted rate for purchase of multiple machines will likely be made available. Additionally, many of the major computer manufacturers have hardware donation programs for which NECWA would be eligible. Finally, Microsoft has an active software donation program oriented specifically to non-profit and disadvantaged populations. The consultant team has committed to donate their time in investigating the most cost effective strategy as a component of their match on the project.

2.1.5 IMPLEMENT COMMUNICATION STRATEGY

A regional effort of this magnitude will require the design and implementation of a communication strategy. This strategy will include, at minimum, creating IRWMP-related postings and web pages; consistent and systematic preparation and publication of meeting notes; creation of a small group of representatives who would be available to make presentations and provide updates to RWMG and non-RWMG entities across the region; and development and distribution of brochures, newsletters, and press releases for each major phase of the work plan.

An outreach strategy will be utilized throughout the plan development and implementation process that includes regular updates by all RWMG members at each RWMG meeting to ensure that the larger group is informed of its member activities. In addition, individual RWMG members will report the progress of IRWMP development to their respective organizations. Protocols to ensure and assist in this information sharing will be identified at the initial region-wide RWMG meeting (Task 2.2.3, below).

Local libraries will play an important role in the communication strategy. Options for Internet connection in this disadvantaged rural region are limited, and many RWMG members and members of the general public, have limited

or no online access. As a result, hard copies of materials will be distributed when possible and will be made available at libraries across the region.

A regional tour will be held for the existing and new RWMG members to acquaint all participants with the resources of the various sub-regions in the Upper Pit River Watershed area.

2.1.6 DESIGN, LAUNCH, AND ONGOING UPDATES IRWMP WEBSITE

The PRWA has an existing website that was created in 2005. The Planning Grant Proposal Development Committee has determined that the current website does not have the capacity to support the functions and level of service required by this IRWMP development process.

The consultant proposes to develop a web-based watershed portal website. Web-based portals provide a powerful platform for building community and sharing information. They support effective collaboration and decision making, as well as increased community involvement.

The watershed portal website proposed for the Upper Pit River Watershed IRWMP will provide both public-facing (web site) and internal (intranet) functionality for the IRWMP community. The portal will serve as an online library for organizing all of the documents and digital resources created and collected by the group. It will also host a directory of projects in the watershed. Project sponsors will be able to add their projects by logging in to the website and filling in a form with information such as title and description, keywords, location, and participating organizations and individuals. The list of available fields, or schema, will be based on the schema developed for the Bay Area IRWMP. This schema will be used as a starting point and extended with other fields as needed. Inside the project's workspace it will be possible to add other types of content such as documents, reports, photos, videos, news items, and more. The project area can have both public and internal components.

The consultant will take primary responsibility for the technical aspects of website design and launch. The CC and RWMG will direct the consultant as to the functions, attributes, and aesthetics of the web site. The regional coordinator will be trained to update the website on a monthly basis. Content for the website will be generated by the consultant, RWMG members, and, where appropriate, stakeholders. Additionally, technical data for the site will be provided directly or via links by RWMG members.

2.1.7 PUBLIC INVOLVEMENT

The Upper Pit River Watershed IRWMP development effort will be an open process, which means that meetings will be open to the public. Agendas will be sent out in advance of meetings via emails to stakeholder groups and will be announced to the public via press releases, project and member newsletters, local newspapers, and local libraries. Also, the public will have the opportunity to participate at each meeting.

2.2 IRWMP DEVELOPMENT PROCESS

The governance structure required to develop the IRWMP document will be interim in nature, while a permanent governance structure will be necessary to support implementation of the Plan (e.g., regular IRWMP updates and ongoing project development and implementation).

While members of the RWMG have worked together to produce numerous important documents relevant to long-term watershed management, these participants have not worked within an organized structure to develop and implement joint projects. Additionally, the recruitment of additional stakeholders will result in the introduction of new personalities, priorities, interests, and mandates into the collaborative decision-making venue.

The identification of roles and responsibilities will be of particular importance because the current PRWA members have been working together for a decade and new stakeholders will need to be fully involved in the

decision-making process. Specific roles and responsibilities of individual stakeholders will be identified, and these will be clarified in meeting summary notes and formalized in the MOU, as necessary.

Experience across the state has shown that creative facilitation techniques are extremely useful for IRWMP development and implementation meetings. A unique facilitation strategy (known as graphic facilitation) has proven to be effective in eliciting participant commitment and creating a common vocabulary and conceptual framework that is sustained for the duration of the project. This technique will be utilized as necessary during development of the IRWMP document.

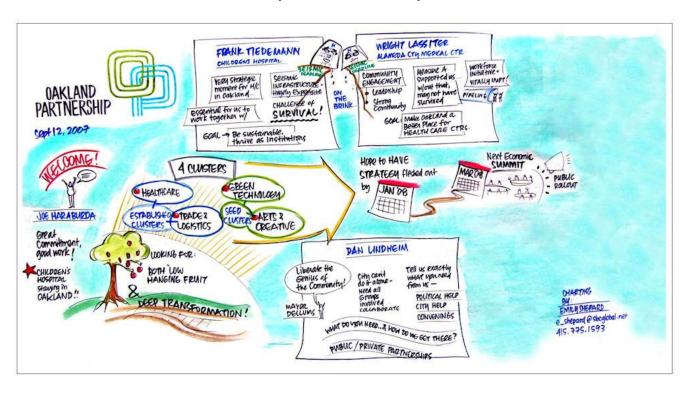


Figure 2-I
Graphic Facilitation Example

An additional technique that involves the use GIS maps projected onto a white board will be utilized during specific tasks to facilitate the process of increasing understanding and building consensus around specific topics, as well as developing specific IRWMP sections. This technique allows meeting participants to gain a deeper understanding of issues, as everyone present can see the projected maps or materials and indicate specific information (such as concerns or opportunities) by writing the information on the white board. This information can then be used to revise or refine the GIS maps in real time, so that attendees can leave the meeting knowing that their input has been reflected. The revised maps can also be distributed to attendees or individuals not present at the meeting.

2.2.1 COMMITTEES IN SUPPORT OF IRWMP DEVELOPMENT PROCESS

A wide variety of roles and responsibilities will be required to facilitate overall IRWMP development, including data collection, evaluation, integration of issues, coherent project development activities, and development of objectives. In addition, the process by which decisions are made by the RWMG will require the provision of data and information to the group. An interlocking system of committees and sub-committees has been devised to fulfill

these functions. These committees and sub-committees include the RWMG, CC, sub-committees, technical advisory committees (identified in specific work plan tasks), and the consulting team. Previous planning efforts in the region have relied on consensus-based decision making; therefore, this approach will be utilized during IRWMP preparation.

The primary responsibilities of the RWMG will be to provide a venue for collaboration and joint problem solving, oversee the function of the various sub-committees, provide a forum for candid discussions in pursuit of resolving regional conflicts, and comment, review, and approve all of the key deliverables.

The CC will manage interim preparation of a wide variety of draft sections. The CC will work with the consulting team to develop draft IRWMP sections including region description, water-related use issues and conflicts, resource management strategies (RMS), objectives, climate change, project development and integration, and data management. The CC review of document sections will be managed to ensure that a single integrated set of comments is provided to the consulting team. The CC will also assist with the final integration of plan sections into the completed IRWMP document. The CC will meet monthly for the duration of the IRWMP preparation period. Additional groups (such as topically oriented work groups) may be identified over the course of the initial RWMG meeting; however at minimum the CC must be confirmed.

The sub-committee structure will likely include two primary types—topical and sub-regional/geo-specific. Topical sub-committees that may be formed include objectives, water-related conflicts, project development, and performance measures. The role of these sub-committees would be to evaluate available information, supported by the consulting team, to prepare technical memoranda, data inventories, frameworks and procedures, and other materials to inform RWMG deliberations. The sub-committees would be designated by and report to the RWMG.

The use of technical advisory committees to support RWMG discussions on such issues as climate change, objectives, and data management may be required. The technical advisory committees would be designated by and report to the RWMG.

The consulting team has assembled a team of sub-consultants with particular expertise in a variety of disciplines necessary for IRWMP preparation. The consulting team will serve as functional staff to the RWMG, as well as any sub-committees and technical advisory committees. The consulting team will conduct data collection and research, develop checklists and outlines to support committee and sub-committee deliberations, retain primary responsibility for integrating the efforts of the various committees and sub-committees, serve as primary support for project development activities, generate draft and final IRWMP sections, and generally support all of the tasks necessary to prepare the IRWMP document. In addition, the consulting team will provide facilitation, conflict resolution, and communication support to the work effort.

Table 2-3 below presents a list of RWMG, CC, initial projections for regional sub-groups, TAC, and work group meetings in support of the entire project.

TABLE 2-3
SUMMARY OF ANTICIPATED MEETINGS BY IRWMP DEVELOPMENT ENTITY

Entity	Projected Number of Meetings
RWMG	5
СС	18
Regional (4)	16
TAC¹	20
Work Groups ²	25

2.2.2 PREPARE MATERIALS TO SUPPORT INITIAL REGION-WIDE RWMG MEETING

Prior to convening the initial region-wide RWMG meeting (Task 2.2.3), a variety of outreach, education, and process materials will be prepared by the consulting team and distributed to prepare participants for the upcoming meeting. These materials will be developed based on a review of similar materials from other IRWMPs, as well as RWMG and CC members.

2.2.3 CONDUCT INITIAL REGION-WIDE RWMG MEETING

Following the sub-regional outreach effort (Tasks 2.1.2 and 2.1.3), an initial region-wide RWMG meeting will be held at a central location to introduce new participants to existing PRWA members and to explain the role of the consulting team and the upcoming IRWMP development process. Participants' perception of the IRWMP will be significantly influenced by the content, presentation, and impact of this meeting. The meeting will need to demonstrate the value of sustained participation and establish collegial relationships between the various participants. For this reason, the meeting will likely be a half-day session and will include a meal to encourage relationship building. The meeting will be facilitated using techniques and methods that ensure that participants will gain a clear understanding of the IRWMP development and implementation process and its potential value to them and the organizations or communities they represent, as well as facilitating their interaction as stakeholders.

This initial meeting will confirm the establishment of the CC. The potential creation and retention of sub-regional groups (discussed during the stakeholder recruitment effort, Task 2.1.2) will be discussed and confirmed at the initial meeting of the RWMG. Additional working groups may also be identified over the course of this initial RWMG meeting.

The RWMG will have an initial discussion concerning appropriate interaction ground rules, as well as the decision-making levels and processes that will be used throughout the IRWMP development process. Procedures and protocols by which information is communicated to the larger member organizations will be discussed and affirmed.

Lastly, the overall process and schedule for IRWMP development will also be confirmed, as will the task deliverables. The Planning Grant Proposal Development Committee has indicated that the RWMG is likely to

¹ TACs will support the activities of the following tasks: Task __Data Gaps, Task 7- Climate Change, Task 11-Data Management, and Task 14-Technical Analysis. It is assumed that for the purposes of budgeting that each TAC will meet a total of five times.

² It is assumed that there will be no more than five topically-oriented project development workgroups and that these groups will meet a total of five times each.

convene meetings based on the needs of the project rather than an arbitrary schedule; therefore, RWMG meetings will be focused on project deliverables as shown in the project schedule.

2.3 INTERREGIONAL COORDINATION WITH NEIGHBORING AND REGIONAL IRWMPS

There are three IRWMP regions adjacent to the Upper Pit River Watershed IRWMP region: the Upper Sacramento-McCloud, the Upper Feather, and North Sacramento Valley. Preliminary meetings conducted during preparation of this grant application indicate that the Upper Pit River watershed, the Upper Sacramento River-McCloud and the North Sacramento Valley IRWMPs have a variety of issues in common. It is clear from the initial discussions that ongoing interregional coordination will be necessary to ensure that the three IRWMPs adequately address these topics, which include: groundwater resources, tribal outreach, consequences of a potential increase in height of Lake Shasta Dam, consequences of introduction of anadromous fish above Lake Shasta, and issues associated with the State Water Resources Control Board's Irrigation Lands Program.

A preliminary strategy for ensuring coordination will be to conduct a minimum of three interregional workshops attended by RWMG members and IRWMP consultants. These workshops will be half-day and, initially, facilitated by the Upper Pit River Watershed IRWMP's consultant. However, the budget of this planning grant proposal assumes assistance from the Center of Collaborative Policy. In general, each of the meetings will be designed collaboratively by a minimum of one representative from each region with support materials prepared in collaboration with the consulting team taking primary responsibility for developing the meeting materials, meetings, and summaries.

It is anticipated that the outcome of these meetings will be the progressive refinement issue statements, identification of additional studies or assessments, and/or development of a process to ensure ongoing collaboration on key issues during implementation of each participant's respective IRWMP. The outcomes of the meetings will be integrated into appropriate sections of the Upper Pit River Watershed IRWMP based on the decisions of the RWMG, CC and subcommittees. Other participating IRWMP representatives will integrate the results of this interregional workshop series into their plans at a level of detail that is consistent with the rest of their document.

2.3.1 KICK-OFF MEETING FOR INTERREGIONAL COORDINATION

This initial interregional coordination meeting will be held in a central location and will be attended by two primary representatives from each IRWMP region. The purpose of the meeting will be to identify general and specific issues of mutual concern. At the close of the meeting, a list of identified issues and concerns will be distributed to each attendee (hardcopy and electronic) for presentation to their respective RWMGs. Each IRWMP's representative will be responsible for presenting the information to the RWMG, receiving input and comment, and preparing a brief summary of the RWMG conversation for submittal to the kick-off meeting participants. This preliminary list of issues will serve as the agenda for the first meeting of the expanded interregional coordination workgroup.

2.3.2 CONDUCT TWO ADDITIONAL REGIONAL WORKSHOPS

The overall goal of the workshop series is to ensure that the staff, consultants, and RWMGs of all three IRWMPs have a common understanding of issues and topics that will affect the development of goals and objectives, project development, and selection of resource management strategies (RMS). For this reason, after the kick-off meeting, an additional meeting will be conducted in the opening months of IRWMP development to ensure that the idea exchange is represented in the earliest stages of plan development. Once the initial set of meetings is complete, it is anticipated that a single meeting later in the plan preparation process will be conducted to synchronize strategies and approaches both within and between IRWMP regions.

2.3.3 ONGOING SUPPORT OF REGIONAL WORKSHOPS

Initially, the Upper Pit River Watershed consultant will serve as staff to this process, particularly with respect to the kick-off meeting. However, a line item for the Center for Collaborative Policy is provided in each of the IRWMP budgets. In general, the agendas for each meeting will be determined at the close of the previous meeting with the agenda and all supporting materials sent to participants a minimum of ten days in advance of the next meeting. Agendas, materials, and post-meeting outcomes and summaries will be posted on the Upper Pit River Watershed website with the other IRWMPs disseminating this information based on the capacities and preferences of their respective RWMGs.

2.4 DWR SACRAMENTO FUNDING AREA WORK GROUP

In addition to the interregional coordination activities described above, representatives from each IRWMP in the DWR Sacramento River Funding Area (SRFA) have been meeting since June 2008. The Upper Sacramento-McCloud and the Upper Pit River Watershed regions were approved through the RAP and were subsequently contacted by members of the SRFA. The PRWA has participated in the two SRFA meetings that have been convened since the RAP was completed. SRFA members have been working to identify formulas for distributing implementation grant funds within the funding area. The group has also identified mechanisms for intraregional project development and coordination. This provides the Upper Pit River Watershed's RWMG an additional forum for collaboration, communication, coordination, and joint project development. As the SRFA meets roughly once a quarter, depending on external factors such as grant finding cycles, it is expected that there will be a maximum of six such meetings over the life of this project.

Several regional organizations are currently investigating and developing a variety of regional initiatives that address topics of concern to the Upper Pit River Watershed IRWMP Region. Active participation in these efforts by RWMG members may prove instrumental in resolving regional water management conflicts, implementing resource management strategies, developing objectives, identifying objective measurement criteria, and developing projects. Provision of stipends to enable RWMG members to participate in these activities is included in the project budget.

2.5 DEVELOP PROCESS AND PROCEDURE FOR COORDINATING FEDERAL, STATE, AND LOCAL AGENCIES

Many federal, state, and local agencies are currently members of the PRWA, including the Modoc National Forest, North Cal-Neva RC&D, Central Modoc Resource Conservation District, Natural Resource Conservation Service, Pit Resource Conservation District, Modoc County Board of Supervisors, Lassen County Board of Supervisors, Bureau of Land Management, California Dept. of Fish and Game, and others. The RWMG will continue to provide a regional forum for federal, state, and local agencies as they have during preparation of existing watershed management and assessment documents (see background section and Task 3, Region Description). This task will result in the development of specific procedures and protocols for the coordination of agency interaction and communication during Plan preparation.

TASK 3 REGION DESCRIPTION/RESOURCE INTEGRATION

OVERVIEW: Since 2004, five significant watershed management documents have been developed by the PRWA, with consulting assistance from Vestra Resources, Inc (Vestra). The watershed management documents—the Pit River Watershed Assessment (2004), the Upper Pit River Watershed Management Strategy (2010), the Hat Creek Watershed Assessment and Watershed Management Plan (2010), the Burney Creek Watershed Assessment and Watershed Management Plan (2010)—will provide extensive background data for use in developing the IRWMP Region Description section. Vestra, the consultant that assisted in preparation of these documents, has been selected to assist the RWMG in developing the region description section. These documents are detailed and extensive, and the data will

contribute significantly to the completion of this region description (as stipulated in the DWR Prop 84 Guidelines, Appendix C). However, data will need to be updated and expanded to ensure consistency with the IRWMP guidelines, and in some cases data gaps will need to be identified and filled. In addition, the five documents and other source materials will need to be integrated and an integrated region description created.

While the Proposition 84 IRWM Grant Program Guidelines identify "major water related objectives and conflicts" as an element of the region description, the Planning Grant Proposal Development Committee has determined that identification of water-related conflicts will be a key aspect of assessing resource management strategies, focusing local water and land use planning discussions, development of objectives, and project development and integration. Therefore, a separate section that focuses solely on water-related issues and conflicts will be prepared (see Task 4). However, a brief overview of the identified issues and conflicts will be included in the region description.

The consulting team, supported by Vestra, will have overall responsibility for preparation of the region description section. The CC will support this effort by confirming source documents, assisting in identifying data gaps, reviewing draft section language, and providing general oversight and input into the process.

Following completion of the subtasks described below, the consultant will complete an initial draft of the region description section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 3 REGION DESCRIPTION/RESOURCE INTEGRATION

GOALS OF TASK

- 1. Document the diverse water management systems within the plan area
- 2. Update data used in preparation of existing watershed assessments
- 3. Preparation of a region description chapter that considers all seven factors identified in the IRWM Plan Standards
- 4. Identification of data gaps
- 5. Integrate outcomes of climate change vulnerability assessment with region description

KEY DELIVERABLES

- All data relevant to region description collected and evaluated
- Identification of data gaps relevant to completion of IRWMP
- Identification of data gaps requiring extensive additional studying
- Confirmation of IRWMP boundaries
- Pit Region vulnerability climate change analysis
- Region description chapter for IRWMP

SUBTASKS

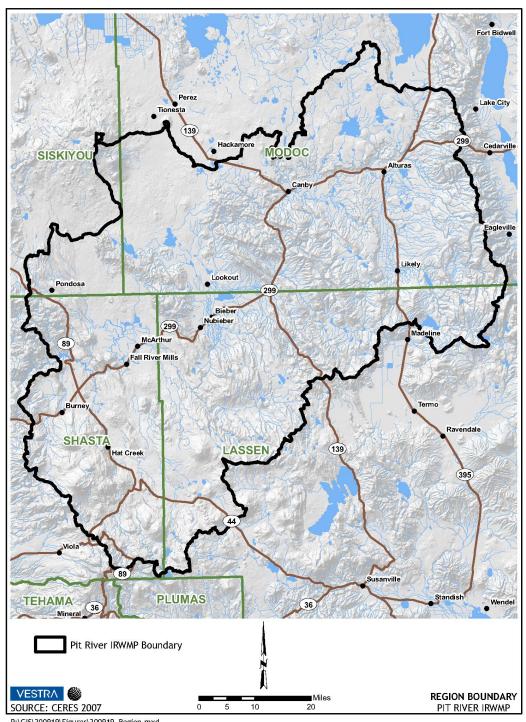
- 3.1 Collect and Evaluate Existing Data
- 3.2 Confirm IRWMP Boundary
- 3.3 Data Gaps

BUDGET

Total Funds Requested: \$18,980

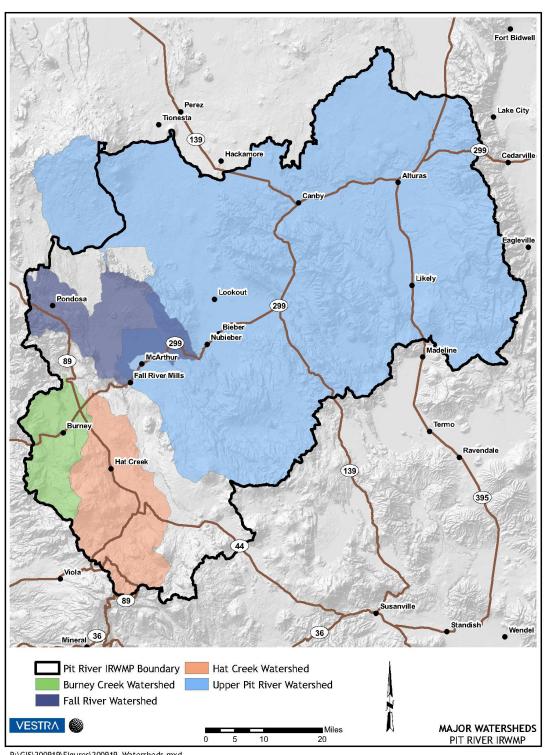
Match: \$0

FIGURE 3-I Upper Pit River Watershed IRWMP Region Boundary Map



P:\GIS\200919\Figures\200919_Region.mxd

Figure 3-2
Upper Pit River IRWMP Region Watersheds



3.1 COLLECT AND EVALUATE EXISTING DATA

All data collected by Vestra as part of the development of the five existing PRWA watershed management documents will be collated and a bibliography created. During outreach efforts identified in Task 2.1, the regional coordinator will endeavor to identify any additional documents, studies, or reports that were not gathered by Vestra. Data sources identified by Vestra include the USDA Forest Service (including recent large-scale environmental impact statements, such as the Sage Steppe Ecosystem Restoration Strategy FEIS), local resource conservation districts, the Regional Water Quality Control Board (including the Sacramento River and San Joaquin River Basin Plans), Bureau of Land Management, county general plans, National Resource Conservation Service publications, and data held by private land managers. In addition, groups such as Cal Trout, who have a local presence, and American Rivers and Ducks Unlimited, who may have data that is relevant to the region, will be contacted to identify additional data sources.

The consulting team, supported by Vestra and the CC, will evaluate all of the collected data with reference to the IRWM Prop 84 Guidelines DWR (Section IV. General Program Requirements A. IRWM Plan Standards, page 21 and Appendix C, pages 40 – 42). The goal of the evaluation will be to identify data gaps that materially affect the ability of the RWMG and other lead consultant to construct the required IRWMP sections (e.g., resource management strategies, objectives, etc). All collected data will be integrated into Task 11, Data Management.

3.2 CONFIRM IRWMP BOUNDARY

The Upper Pit River Watershed IRWMP boundaries were identified and confirmed by DWR as part of the RAP. However, if it becomes apparent as the region description section is prepared that changes should be made in boundary placement the CC, supported by the consulting team, will confer with adjacent IRWMPs to review boundaries with respect to the Upper Sacramento, Upper Feather, and Lahontan areas so that discrepancies can be resolved before finalization of the Upper Pit River Watershed IRWMP. Any recommended changes to the boundary will be discussed with the RWMG prior to finalization of the region description text.

3.3 DATA GAPS

Two types of data gaps have already been identified by the RWMG-designated work group: I) Minor gaps in data that will be needed to complete the region description, and; 2) Substantive gaps that will require significant time, energy, and funding to address (e.g., characterizing the subsurface groundwater movement within the region). Addressing the substantive data gaps will not be part of the IRWMP development effort. A very preliminary evaluation of existing data completed for preparation of this proposal indicates that the breadth of available data will most likely be sufficient to support preparation of the required section; conversations in the region indicate that the existing data gaps can likely be filled by reinterpreting existing data or extrapolating from available data or reports. Strategies to ensure the technical accuracy of reinterpreting or integrating existing data will be developed by the CC in consultation with RWMG.

The CC will work to develop a systematic strategy for identifying regional and local data gaps, identifying the necessary studies or data collection efforts required to address these issues, and a process for prioritizing the relative importance of the various studies and data collection efforts. A second strategy for developing data to address the gaps could include seeking federal, state, or philanthropic funding sources; gathering of data by RWMG-member entities or individuals; and/or development of a project aimed at collecting data for identified data gaps that would be submitted for future Prop 84 funding. However, this second strategy is not part of the IRWMP development effort.

TASK 4 WATER-RELATED ISSUES AND CONFLICTS

OVERVIEW: Identification of water-related issues and conflicts within the region will be central to the development of the IRWMP. The identification of relevant resource management strategies, the development of objectives, and the project review and development process are all integrally connected to the identification of issues and conflicts. While the Prop 84 IRWMP Planning Grant Guidelines require that water-related conflicts be identified as part of the region description section, this topic has been deemed important enough to be addressed as a separate task with its own deliverables. The PRWA and the Planning Grant Proposal Development Committee have indicated that the simple identification of conflicts does not meet the spirit of integrated regional water management.

Task 4 has been broken into three distinct elements. The first element consists of a through identification of water-related issues and conflicts across the region, from topical and geo-specific perspectives, and creation of a comprehensive working list of issues and conflicts will be prepared. The second element of the work effort will focus on a concerted effort to resolve as many of the identified conflicts as feasible within the context of IRWMP preparation. Therefore, the majority of the work effort will be focused on targeted discussions, development of critical data, convening interested stakeholders, conflict resolution, and other similar activities aimed at progressive refinement and resolution of issues and conflicts.

The third element will be the preparation of the mandated IRWMP section materials articulating the issues and conflicts that remain at the end of the resolution process. In this way, the identification of issues and conflicts, rather than being a static list, becomes instead a basis for ongoing conflict resolution with the goal of identifying those conflicts that are amenable to resolution or reduction either during Plan preparation or as a direct result of Plan and project implementation.

Following completion of the subtasks described below, the consultant will complete an initial draft of the water-related issues and conflicts section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 4 WATER-RELATED ISSUES AND CONFLICTS

GOALS OF TASK

- 1. Comprehensive identification of water management issues in region
- 2. Identification of primary and secondary water management conflicts
- 3. Facilitated resolution of identified conflicts as an attribute of IRWMP preparation, wherever feasible

KEY DELIVERABLES

- Comprehensive list of issues and conflicts
- Ongoing conflict resolution activities
- Document summarizing outcomes of each individual conflict resolution effort
- Water-related issues and conflicts chapter of IRWMP

SUBTASKS

- 4.1 Develop Preliminary Working List of Issues and Conflicts and Present to RWMG
- 4.2 Revise Working List of Issues and Conflicts Following RWMG Review
- 4.3 Ongoing Conflict Resolution Activities
- 4.4 Resolve Data Gaps Resulting from Issues and Conflicts Discussion
- 4.5 RWMG Final Confirmation of Issues and Conflicts

BUDGET

Total Funds Requested: \$35,080

Match: \$0

4.1 DEVELOP PRELIMINARY WORKING LIST OF ISSUES AND CONFLICTS AND PRESENT TO RWMG

As a result of preparation of the watershed assessments and other key documents in recent years, many of the key issues and conflicts in the region have been identified and in many cases discussed. However, with the expansion of the RWMG and the mandated components of the IRWMP, it is likely that some additional topics will be identified. The consulting team will interview all RWMG members and no more than ten additional stakeholders across the region to develop a preliminary working list of issues and conflicts of concern. This preliminary working list will be reviewed, augmented, refined, and revised by the CC.

The preliminary working list will be presented to the RWMG. The presentation will be structured in such a way to ensure that all perspectives on each issue are articulated, the divergent rationales behind identification of issues and conflicts are clear and all constituency interests and positions are communicated. The product of this discussion will be a draft working list of issues and conflicts.

4.2 REVISE WORKING LIST OF ISSUES AND CONFLICTS FOLLOWING RWMG REVIEW

Based on the conversation and dialogue at the RWMG, the CC, supported by the consulting team, will further refine the working list. This may include grouping and merging of issues and conflicts, as well as distillation and separation of issues into their component parts. This work product will then be presented to the RWMG for review and approval. This document will form the basis for outreach, dialogue, and negotiation across the region over the subsequent months.

4.3 ONGOING CONFLICT RESOLUTION ACTIVITIES

Early in the IRWMP development process, members of the Blackfoot Challenge, a highly successful watershed collaborative in Montana will be brought to the region to inform the RWMG and other stakeholder constituencies of the specific strategies that they have used to achieve significant and durable consensus within their region. Working in close consultation with the CC, as well as interested RWMG members and stakeholders, a systematic program aimed at resolving identified issues will be developed. The consulting team will utilize their extensive experience in natural resource conflict resolution to develop a plan that will result in targeted work with all affected parties to attempt to resolve or advance the dialogue on particular topics. This effort will include the services of conflict resolution specialists, such as the Center for Collaborative Policy, as well as a mix of techniques and methods, such as regional or topical forums or workshops, facilitated discussions, interest-based negotiations, and small group dialogue. The resolution of issues and conflicts could result in the creation of MOUs, collaborative project development, waivers of agency policies or regulations, intergovernmental cost savings, consolidated drought management plans, and/or increased dialogue between divergent interest groups.

4.4 DATA TO SUPPORT ISSUES AND CONFLICTS DISCUSSION

Experience in the region has shown that water management conflicts are often resolved by addressing data gaps, reinterpreting old data, revisiting outcomes of previous studies with a new perspective, and/or instituting targeted monitoring. As a result of this experience, this task will focus on intentional and strategic revisiting of previously collected and interpreted data and technical information, monitoring outcomes, and other available data sources. These activities will be directed by the RWMG, CC, and if necessary a TAC. The goal of this effort will be to provide fresh impetus and documentation for reducing or eliminating perceived or actual conflicts within the region, based on informed and defensible consensus building.

As a result of previous tasks, a catalogue of data necessary to address regional conflicts or issues will be prepared. A contingency line item is included in the budget to ensure that there is some capacity to develop or access new data, if required to address regional conflicts. Additional data will only be gathered if directed by the RWMG or the CC.

4.5 RWMG FINAL CONFIRMATION OF ISSUES AND CONFLICTS

Throughout the process the RWMG will be updated regularly as to the status and outcomes of these conflict resolution activities and any alterations to the program identified as a result of the activities described in Task 4.3. At the close of the work effort, the consulting team will prepare a document summarizing the outcomes of each individual effort, the methods and techniques employed, the current status of the issue or conflict, options for ongoing resolution, critical data needs to facilitate resolution of particular issues, and issues that appear to be intractable in the context of the IRWMP development process. The RWMG will evaluate the outcomes and provide the consulting team with input and direction concerning the content of the IRWMP section.

TASK 5 RESOURCE MANAGEMENT STRATEGIES

OVERVIEW: The California Water Plan Update 2009 has identified 32 individual resource management strategies (RMS) that each IRWMP must consider when developing its objectives and project development processes. Some of these management strategies will not be directly relevant to the Upper Pit River Watershed IRWMP Region, such as desalination; while others, such as Agricultural Water Use Efficiency, are directly relevant. As a result of this task, the water-related issues and conflicts will be compared to available RMS and a set of applicable RMS will be identified. These RMS will serve to inform the identification of objectives, as well as the project development and review process.

Following completion of the subtask described below, the consultant will complete an initial draft of the resource management strategies section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 5 RESOURCE MANAGEMENT STRATEGIES

GOALS OF TASK

- 1. Review and evaluate each RMS to determine relevance to Upper Pit River Watershed IRWMP Region
- 2. Integrate identified RMS into relevant IRWMP chapters (e.g., Objectives and Project Development)

KEY DELIVERABLES

- Document summarizing applicability of each RMS to Upper Pit River Watershed IRWMP Region
- Integration of RMS into relevant IRWMP chapters
- RMS chapter of IRWMP

SUBTASKS

- 5.1 Resource Management Strategies
- 5.2 Revise and finalize RMS

BUDGET

Total Funds Requested: \$6,410

Match: \$0

5.1 RMS EVALUATION

Utilizing the issues and conflicts narrative developed in Task 4, Water-Related Issues and Conflicts, the consulting team will review all 32 RMS to determine which strategies are relevant and appropriate for the Upper Pit River Watershed IRWMP Region. Where necessary, the consulting team will contact various RWMG members to assure

that the final list takes into account all aspects of identified issues. Based on this research effort, the consulting team will prepare an evaluation of applicable and non-applicable RMS for presentation to the CC for their consideration and to enable the CC to consider each individual RMS. The consulting team will incorporate the CC comments into an evaluation for submittal to the RWMG.

5.2 REFINE AND FINALIZE RMS EVALUATION

The consulting team will meet with the RWMG to present the preliminary evaluation of RMS. At this meeting, the RWMG will review, and if necessary revise, this evaluation. During this meeting, the RWMG will also discuss and confirm the rationale explaining which RMS are applicable, which are not, and why.

TASK 6 LOCAL WATER AND LAND USE PLANNING COORDINATION

OVERVIEW: With a total of less than 10 persons per square mile, one incorporated city, 11 unincorporated communities, and two irrigation districts, the Upper Pit River Watershed IRWMP region is characterized by an extremely small percentage of water being used for domestic consumption via formal infrastructure. The majority of water consumed in the region is drawn directly from area creeks, rivers, or groundwater sources. Agricultural users currently hold the vast majority of water rights in the region. However, PG&E plays a significant role in the releases and management of surface water in the region. During periods of peak flow, PG&E has discretion over the majority of flow releases, while low flow periods are more directly affected by agricultural use.

Many of the existing population concentrations are relics of previous land use types, such as logging or resource extraction. The growth rates for the counties within the IRWMP region are exceedingly light. Domestic growth pressures in the region are currently and predicted to stay minimal. Additionally, county planning departments across the region have limited funds to support large-scale planning efforts. There are no urban water management entities in the region. Agricultural water management is based strictly on individual water rights allocations. There is no coordinated groundwater management entity within the region; however, the Big Valley area has a groundwater group that conducts basic monitoring activities. Therefore, there are few local plans to inform the creation of IRWMP content.

Nonetheless, bringing together water rights holders, the few water agencies, and land use planners and decision makers in the region to discuss and explore the nexus between the existing water use/management profile and land use decision making, particularly in the context of climate change, has been deemed a productive strategy by the Planning Grant Proposal Development Committee.

Following completion of the subtasks described below, the consultant will complete an initial draft of the local water and land use planning coordination section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 6 LOCAL WATER AND LAND USE PLANNING COORDINATION

GOALS OF TASK

- 1. Create functional linkage between water management and land use planning
- 2. Identification of process for establishing and maintaining proactive relationship
- 3. Identification of relevant water planning and land use planning documents
- 4. Description of relationship between existing plans and the IRWMP (matrix format)
- 5. Local water and land use planning coordination chapter in IRWMP

KEY DELIVERABLES

- Regional land use and water management forum focused on elected officials, water managers, and senior planning staff
- Identification of long-term coordination process between land use decision makers and water users
- Local water and land use planning coordination chapter of IRWMP

SUBTASKS

6.1 Outreach and Data Collection

6.2 Convene Conference/Forum/Workshop

BUDGET

Total Funds Requested: \$15,301

Match: \$0

6.1 OUTREACH AND DATA COLLECTION

The consulting team will work with the regional coordinator to systematically identify and contact all of the water providers, managers, and representatives of the key water right holders, as well as land use decision makers, across the region. These outreach activities will be initiated by written and oral communications with each of the targeted agencies, organizations, and/or individuals to ensure that all those interviewed understand the context in which this data is being collected.

The identified individuals or the representatives within each of the targeted entities will be interviewed in order to develop a clear profile of water management systems, procedures, and strategies across the region, as well as an evaluation of future growth pressures. The data gathered during these interviews will be collated and synthesized with the assistance of the CC.

During these interviews, copies of all relevant management and land use plans will be obtained, reviewed, and their relevance to the IRWMP process determined. A matrix clarifying the relevance of the collected plans to the IRMWP will also be prepared.

Federal and state entities with water or resource management responsibility or authority in the region will also be contacted as part of this work effort to determine the relevance and importance of their plans to development of the IRWMP.

6.2 CONVENE CONFERENCE/FORUM/WORKSHOP

Following the outreach and data collection task, the RWMG will be consulted to determine the best method for convening a regional discussion that addresses both water management and land use planning. The exact format for this discussion will be determined at that time, but could include a workshop, forum, or conference. It is anticipated that coordinating this event to ensure maximum participation will require roughly six months of preparation so that all stakeholders and decision makers are present for the discussion. Because of the agricultural

nature of the region, it is likely that this event will need to be held in the winter months to ensure maximum participation. Whatever format is ultimately chosen, the event will be designed, supported, and facilitated by experts from the consulting team and potentially the Center for Collaborative Policy. An additional consideration will be whether to merge or separate the domestic and municipal and agricultural water managers over the course of the event. In addition, local and regional DWR staff will also be consulted during the design of the event, and will potentially actively participate as well.

TASK 7 CLIMATE CHANGE

OVERVIEW: The impact of climate change on snow pack, river flows, storm frequency and intensity, air and water temperatures, and localized wind patterns has not been examined at a regional level, nor has the impact of these changes on water supply reliability, water quality, and ecosystem values. An additional aspect of climate change within this region is the local residents' diverse perspectives on the existence, cause, and impacts of climate change. These factors will be incorporated into the analysis and the discussion surrounding climate change, and the manner in which the IRWMP addresses vulnerabilities and adaptations. The discussion of climate change will be consistent with the Prop 84 IRWM Program guidelines. However, in respect of the multiple perspectives on climate change in the region, consideration of implications and adaptations will include discussion of a "no change" option, representing historical norms.

NECWA will serve as the primary coordinator for discussions on this topic with water rights holders throughout the Upper Pit River Watershed IRWMP region.

Following completion of the subtasks described below, the consultant will complete an initial draft of the climate change section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, IRWMP Development.

TASK 7 CLIMATE CHANGE

GOALS OF TASK

- I. Creation of a TAC
- 2. Ensure representation of diverse perspectives on climate change are integrated into evaluation
- 3. Consensus-based identification of regional vulnerabilities to climate change based on region-specific data
- 4. Consensus-based identification of short-term and long-term adaptation strategies
- 5. Extend the climate change conversation throughout the region using library-based internet access
- 6. Develop specific strategies to identify and mitigate greenhouse gas emissions

KEY DELIVERABLES

- TAC
- Draft vulnerability analysis strategy
- Vulnerability analysis document
- Targeted outreach, communication, and collaboration
- Adaptation strategies report
- Strategy to identify and mitigate greenhouse gas emissions
- Integration of vulnerability analysis into region description chapter
- Climate change chapter of IRWMP

SUBTASKS

- 7.1 Create Technical Advisory Committee (TAC)
- 7.2 Collect and Synthesize Region-Specific Climate Change Data
- 7.3 Develop and Implement Modeling Strategy
- 7.4 Initial Identification of Regional Vulnerability to Climate Change
- 7.5 Identify Regional Adaptation Strategies
- 7.6 Greenhouse gas reduction
- 7.7 Public Outreach and Education

BUDGET

Total Funds Requested: \$25,380

Match: \$0

7.1 CREATE TECHNICAL ADVISORY COMMITTEE (TAC)

Federal, state, and local agencies with water and resource management responsibilities or interests in the region and a particular expertise or experience in consideration of potential climate change effects will be identified by members of the RWMG. These individuals, as well as representatives of key local constituencies (e.g., ranching and farming, counties, and the environmental groups), will be recruited to participate in the TAC. While membership on the TAC will not be artificially limited, the CC will work to ensure sufficient depth and breadth of perspective to effectively guide the identification of regional vulnerabilities and adaptation strategies. The TAC will meet under the supervision of the CC and will, when necessary, conduct joint meetings with either the CC or the RWMG. In order to be effective, the TAC must fully represent not only individuals with technical knowledge of climate change but also individuals with interests that would be affected by the outcome of the evaluation.

7.2 COLLECT AND SYNTHESIZE REGION-SPECIFIC CLIMATE CHANGE DATA

A variety of federal and state agencies within the region have considered the potential impacts of climate change on the resources and facilities for which they have management responsibility. These evaluations have produced policy statements, preliminary vulnerability assessments and, in some cases, initial identification of adaptation strategies. All of these documents and, where possible, the supporting background documentation will be collected to inform the IRWMP climate change analysis.

The TAC, supported as necessary by the consulting team, will evaluate the collected data, as well as the primary documents identified in the Prop 84 IRWM Grant Program Guidelines and the Climate Change Clearinghouse documents. This evaluation will not be exhaustive in nature, but rather will serve to summarize the available data in such a way that the TAC can determine which documents, reports, and/or data to draw on during the course of their evaluation. The updated RWMG website will be utilized as part of this task to ensure that as much of the available data is posted for use by PRWA RWMG stakeholder members.

7.3 DEVELOP AND IMPLEMENT MODELING STRATEGY

University of California, San Diego, has developed the capacity to calculate the impacts of predicted climate change scenarios on a variety of key criteria such as temperature, precipitation, base flow, and runoff (see attachment, Modeling Climate Change). The data can be prepared for any of these criteria for any year utilizing any of the six state-approved computer models, each of which has a high and low emission component, resulting in a total of 12 different modeling runs for any single criteria. After consultation with the TAC to identify a preliminary set of high-priority criteria, a representative sample of the available modeling runs, by topic and year, will be generated. Based on these sample runs, the TAC will be able to identify both specific criteria and specific years that they wish to see modeled to provide a basic understanding of the possible variability of future climate change scenarios.

After reviewing the preliminary samples, the TAC will direct the consultant to run each of the models under a high and low emission assumption, utilizing the criteria that the TAC has determined is most critical to developing a useful set of future scenarios. The output of these modeling runs will be used to determine "worst case," "best case," "no change," and "middle range" scenarios for each identified criteria. A 20-year planning horizon will be of primary concern, however, modeling for future years beyond the horizon may be deemed desirable by the TAC. Additionally, a representative set of modeling runs will be completed for the years 1990 through 2010. In this way, the TAC will be able to develop scenarios that are scenario dependent rather than model dependent, resulting in a greater capacity to predict regional vulnerabilities.

7.4 INITIAL IDENTIFICATION OF REGIONAL VULNERABILITY TO CLIMATE CHANGE SCENARIOS

Utilizing the data developed during Task 7.3, the TAC will conduct a vulnerability analysis to more fully understand the potential impacts of the predicted changes. Generally, the process would consist of evaluating model runs generated during the previous task and/or model runs prepared at TAC direction during this vulnerability analysis stage. Based on the outcomes of the predicted scenarios, the TAC would prepare a preliminary identification of the likely changes in vegetation that would result in each scenario. Preliminary discussions indicate that the regional vulnerability can be predicted based on the changes in vegetation that would occur across the region. The predicted vegetation changes will be the initial starting point for identifying and discussing regional vulnerabilities.

To facilitate the identification of vegetation change, the RWMG proposes to utilize a combination of GIS mapping and group discussion. This GIS comparison of future climate change scenarios will be accomplished through a two-step process: First, utilizing onsite, real-time GIS mapping to reflect the collective discussion; second, individual TAC member review of the vegetation change scenario maps.

Specifically, the first step of this process will include projecting a vegetation map for the group, facilitated debate as to likely vegetation changes as a result of individual climate change scenarios and using the map as a visual aid, revision of the projected image in real-time to allow TAC members to see the results of their discussion, refinement of the projected map based on additional conversation, collective agreement that the projected map

represents a defensible assessment of vegetation and/or habitat changes for the climate change scenario under debate. This image will be saved and distributed electronically and as a hard copy to all TAC members and/or interested parties. These maps will then form the basis for the subsequent discussion. This iterative strategy of displaying predicted changes and then reviewing and discussing these changes will continue until the group determines that a defensible and representative sample of potential climate change vulnerabilities associated with vegetation and habitat are complete.

While the modeling runs and vegetation/impact maps will be necessary general in nature they will yield a pragmatic representation of potential climate change scenarios. This program-level evaluation will support the identification of regional vulnerabilities from a natural resource perspective.

The TAC will specifically identify additional strategies to model program-level water supply implications and the effects of predicted changes agricultural and ranching operations across the region. The analysis is not intended to direct or support individual or specific management policies, procedures, or regulatory decisions. Instead, it will be intended to anticipate future climate change scenarios and vulnerabilities, thereby supporting a general evaluation of potential adaptation strategies.

7.5 IDENTIFY REGIONAL ADAPTATION STRATEGIES

The development of regional adaptation strategies will begin once the preliminary vulnerability analysis has been undertaken. Discussions of possible future scenarios inevitably leave directly to discussion surrounding management and policy-level discussions to those predicted changes. Recognizing the closely linked nature of predicted impacts and mitigation, these iterative discussions will be tracked until such time that a more focused evaluation become possible (likely once the draft vulnerability document is being prepared).

Correlating possible, predicted, future scenarios to possible, available, future adaptation measures is not an exact science. Additionally, the consequences of predicted scenarios and available mitigations being presented in a written form must be anticipated. For this reason, the TAC will report regularly to the CC and the RWMG to ensure that all of the interests in the region that might be affected the climate change discussion are directly involved in identify in both future vulnerabilities and available adaptations. The TAC discussions with the CC and RWMG will be facilitated to ensure that the analysis and methodologies, interests, expectations, and opinions of the RWMG members.

Because the evaluation is at a program-level of detail, the discussion of adaptation strategies will be similarly general in nature. The goal of the adaptation strategies evaluation will be threefold: I) To engage regional entities with management responsibilities in a collective discussion at long-term collaboration, to minimize impacts of climate change; 2) To involve a diverse set of perspectives in determining possible future actions, and; 3) To ensure that all of the interest potentially affected by climate change have a consistent opportunity to participate in the identification of future conditions and available mitigations.

Per the Prop 84 IRWM Grant Program Guidelines, the outcomes of the vulnerability analysis will be integrated into the region description section (see Task 3). However, because of the potential diversity of opinions on the subject, a separate climate change section describing both the vulnerabilities and the potential adaptation measures within the region will be included in the IRWMP to enable a reader to clearly understand the analysis and the conclusions.

7.6 GREENHOUSE GAS REDUCTION

Because all aspects of water management have an impact on greenhouse gas (GHG) emissions, identification of primary sources of GHG will be a key element of the evaluation. Project development will be a particular nexus for this issue. A set of GHG calculation protocols, criteria, and formulas will be developed and made available

through the newly developed web portal and will be distributed as part of the project development outreach activities. Finally, GHG emissions and appropriate mitigations and the presence of appropriate mitigations will be part of the project ranking criteria for integration of project into the IRWMP.

7.7 PUBLIC OUTREACH AND EDUCATION

Outreach on the climate change issue will focus on four primary constituencies: I) agencies (local, state, and federal); 2) Holders of water rights; 3) Organizations and interest groups; 4) and the general public. The outreach will be coordinated at the CC and TAC level; however, the specific outreach strategies and materials will be developed in consultation with the RWMG. Overall, this task will result in dissemination of information developed by the TAC, provision of educational and technical materials, and a clear method to solicit suggestions and participation.

TASK 8 OBJECTIVES

OVERVIEW: The development of objectives is a key product in the overall preparation of the IRWMP. Collaborative identification of objectives will be based on the work accomplished in the previous tasks. This work plan is focused on developing clear, concise, and quantifiable objectives.

The PRWA has already expended considerable effort in developing watershed-wide management objectives in the Upper Pit River Watershed Management Strategy, published in 2010. This watershed management document identified nine goals, 35 objectives, and more than 115 management actions. As currently configured, the management actions identified potential projects at a conceptual level. Expanding the existing objectives to respond to the full range of resource management strategies will be a primary focus of this task. The CC will also discuss project development during the identification of objectives, as these closely-related processes will inform each other.

Following completion of the subtasks described below, the consultant will complete an initial draft of the objectives section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 8 OJBECTIVES

GOALS OF TASK

- 1. Ensure planning effort consistency with Basin Plan Objectives, 20x2020 water efficiency goals, and minimum IRWM plan standards (CWC Section 10540(C))
- 2. Establish a set of quantitative and/or qualitative metrics for measuring objectives
- 3. Determination as to desirability of prioritizing objectives and if prioritizing objectives is deemed appropriate, develop process and strategy
- 4. Integrate water-related issues and conflicts and RMS into identification of objectives

KEY DELIVERABLES

- Compendium of materials to support identification of objectives
- Clearly articulated set of IRWMP objectives
- Development of quantitative and/or qualitative measurement metrics
- Determination as to prioritization of plan objectives (criteria for prioritizing and creation of prioritized lists)
- Objectives chapter in IRWMP

SUBTASKS

- 8.1 Collect Materials to Support Discussion of Objectives
- 8.2 Develop IRWMP Objectives and Measurement Criteria
- 8.3 Prioritization of Objectives

BUDGET

Total Funds Requested: \$15,320.00

Match: \$0

8.1 COLLECT MATERIALS TO SUPPORT DISCUSSION OF OBJECTIVES

To initiate the process, the consulting team will gather the following materials: the preliminary working list of water issues and conflicts (Task 4), an overview of the resource management strategies section, a compendium of goals and objectives from other IRWMPs across the state, and a list of possible objectives derived from work already completed by the PRWA. As required by DWR, the consulting team will prepare an overview and abstract of the Basin Plan objectives, an evaluation and abstract of the 20x2020 Water Efficiency Goals, and an evaluation and abstract of applicable requirements of the California Water Code.

The consulting team will have primary responsibility for collecting and synthesizing measurement criteria samples from IRWMPs and other documents across the state. These samples will aid the RWMG in determining the most appropriate measurement options. These materials will support initial CC discussions.

8.2 DEVELOP IRWMP OBJECTIVES AND MEASUREMENT CRITERIA

The CC or a designated subcommittee will utilize the materials developed in Task 8.1 to begin their discussion of IRWMP objectives. This discussion will be iterative in nature, include quantitative and/or qualitative options for measuring objectives, and consideration of overall IRWMP implementation on the form and content of identified objectives. While the CC or subcommittee will have primary responsibility for developing draft objectives, the RWMG will have primary responsibility for finalizing the objectives and their measurement criteria. The consultant will prepare a series of progressively refined memoranda summarizing the evolution of the discussion with the final document being sent forward to the RWMG.

8.3 PRIORITIZATION OF OBJECTIVES

Some IRWMPs in the Sacramento River Funding Area are considering prioritizing objectives within individual programs, while others propose to prioritize objectives as a whole. The consulting team will develop a memo discussing the pros and cons of prioritizing IRWMP objectives (e.g., Pro: Enhance the ability of the group to focus

future action, especially project development. Con: Conflict over prioritization could stall the process). The memo prepared during this effort will be presented to the CC for review and comment. As a result of its deliberations, the CC will make a recommendation to the RWMG as to whether objectives for the IRWMP should be prioritized. The RWMG will have ultimate decision-making responsibility on this matter. If it is determined that prioritization serves the interests of the region, then the CC, in consultation with the consulting team, will develop a suggested prioritization criteria that will be confirmed by the RWMG.

Prior to developing the draft objectives section for the IRWMP, the RWMG will confirm the objectives and the selected measurement criteria (qualitative and/or qualitative), as well as confirming whether objectives will be prioritized. If objectives are prioritized, the prioritization would be presented at this time for final confirmation.

TASK 9 PROJECT DEVELOPMENT AND INTEGRATION

OVERVIEW: An integrated project development process combined with successful project implementation is a key factor in measuring the overall success of an IRWMP. The goal of this task is to develop a suite of projects that are sufficiently developed to effectively implement the IRWMP.

In order to achieve this goal a programmatic framework will be identified, a preliminary project development process will be implemented, project application materials will be created, a project review process will be established, a CEQA/NEPA needs assessment will be completed, and a DAC project-development manual will be created.

Additional items or activities that will influence this task are the program preferences and state-wide priorities identified in the Prop 84 IRWM Grant Program Guidelines, policy and regulatory constraints and requirements, coordination with adjacent regions, and DAC and EJ benefits and considerations. Further, the work plan tasks associated with resource management strategies (Task 5), climate change (Task 7), and objectives (Task 8) will inform, and be informed by, project development activities.

The project development activities described in this task are specifically oriented toward the program preferences and state-wide priorities identified in the Prop 84 IRWM Grant Program Guidelines. They are listed below.

Program Preferences

- Include regional projects or programs (CWC §10544)
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR
- Effectively resolve significant water-related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Effectively integrate water management with land use planning
- For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.
- Address state-wide priorities (Table I establishes the specific Statewide Priorities for the IRWM Grant Program.)

Statewide Priorities for the IRWM Grant Program

- Drought Preparedness
- Use and Reuse Water More Efficiently
- Climate Change Response Actions
- Expand Environmental Stewardship
- Practice Integrated Flood Management
- Protect Surface Water and Groundwater Quality
- Improve Tribal Water and Natural Resources
- Ensure Equitable Distribution of Benefits

The PRWA already includes the majority of the federal, state, county, and large corporate land management entities within the region and has considerable experience in developing collaborative management strategies. During the IRWMP process, policy and regulatory constraints will be carefully factored into both development of objectives and identification of regionally relevant projects. The PRWA has begun dialog between agency and other stakeholders to develop strategies for complying with federal, state, and county regulatory mandates and policies, while developing creative and meaningful solutions to cross-jurisdictional challenges.

The coordination activities described in Task 2 will also inform the project development process by fostering communication across boundaries, as well as providing opportunities to identify overlaps in project design. Opportunities for collaboration and development of joint projects will be a key element of the overall project development effort.

The Upper Pit River Watershed Region is largely made up of disadvantaged communities, and the majority of the non-federal agencies in the region have extremely limited resources, therefore a strategy for compliance with the guideline requirements that does not render project development infeasible will be a project planning focus.

The vast majority of the communities (identified as zip code/Census areas, see Table 2-2) within the IRWMP region are characterized as disadvantaged or severely disadvantaged and the unique nature of population distribution across the region results in an extremely small number of public service districts that directly serve these populations. Consequently, the direct connection between water quantity and quality enhancement projects and an individual DAC can be difficult to quantify and confirm. For example, knowledge of groundwater movement through and across the region is limited, so conducting the extensive and expensive studies that would be required to draw a direct connection between an individual water quantity enhancement project and a specific DAC may not be an appropriate strategy to address this issue.

For these reasons, considerable time and attention will be devoted to the development of projects that can be shown to directly benefit DACs and to work with DWR staff to identify acceptable methodologies for quantifying the benefits of natural resource (e.g., water quantity, water quality, and environmental stewardship) to the region's DAC and tribal communities.

Following completion of the subtasks described below, the consultant will complete an initial draft of the project development and integration section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 9 PROJECT DEVELOPMENT AND INTEGRATION

GOALS OF TASK

- 1. Process and materials for systematic integration of individual projects, project sponsors, and project outcomes into project development process
- 2. Development of specific procedures for submitting a project to the plan
- 3. Development of procedures for review of projects that implement the plan
- 4. Provision of technical assistant to DAC communities and interests to ensure capacity building, diverse participation, and access to project development process
- 5. Technical assistance and support of developing targeted projects to full compliance with minimum IRWMP Project Review Standards (A through L)

KEY DELIVERABLES

- Development of program framework
- Integration of existing projects
- Development and integration of new projects utilizing a structure application and working group process
- Preparation of project application materials
- Project review process, including criteria
- Preparation of DAC Project Development Manual for use within region and for export to DACs across the state
- Project develop and integration chapter in IRWMP

SUBTASKS

- 9.1 Program Identification
- 9.2 Preliminary Project Development Process
 - 9.2.1 Integration of Existing Projects
 - 9.2.2 Developing and Integrating New Projects
 - 9.2.3 Develop and Initiate Strategy for Moving Project to Ready-To-Proceed Status
- 9.3 Prepare Application Materials
- 9.4 Develop Project Review Process
- 9.5 CEQA/NEPA Considerations
- 9.6 Prepare DAC Project Development Manual

BUDGET

Total Funds Requested: \$91,040

Match: \$22,800

Match Sources: Consultant and RWMG members

9.1 PROGRAM IDENTIFICATION

The Planning Grant Proposal Development Committee has identified the need to develop a program structure to support project development. Programs enable a more systematic project development effort, create the capacity to rank similar projects against one another, and facilitate a gap analysis in project design, which can result in targeted project development efforts. Based on discussion within the Planning Grant Proposal Development Committee and a review of Prop 84 Program Preferences and Statewide Priorities, a preliminary programmatic structure has been identified as including drought preparedness, water use efficiency, climate change, environmental stewardship, integrated flood management, surface and ground water quality, tribal and EJ concerns, including equitable distribution of benefits. Information gleaned from other IRWMPs suggests that a number of the resource management strategies (e.g., irrigation efficiency) may ultimately be appropriate program categories. The product of this task will be a finalized and approved programmatic structure. This process will directly inform and be informed by the development of objectives (Task 8).

9.2 PRELIMINARY PROJECT DEVELOPMENT PROCESS

The project development process comprises three distinct elements: (I) working with RWMG members to integrate their existing projects into the IRWMP, (2) developing new or expanded regionally oriented projects to meet multiple objectives and involve diverse stakeholders, and (3) developing a strategy for moving existing and future projects to ready-to-implement status and initiating implementation of this strategy.

Development of projects within the Upper Pit River Watershed IRWMP Region has traditionally been accomplished by either individual property owners or agencies targeting localized resource management or enhancement. Property owners and agencies within the region have extensive experience and success in developing and implementing relatively small-scale projects. The identified project development process will build on this regional experience and success to allow for the creation of landscape-level, multi-objective, multi-stakeholder projects. This could include "bundling" of small, individual projects to create an integrated project with larger scale benefits, or bringing together multiple partners to create a single integrated project with diverse components. As a result, a targeted outreach to individual property owners and agencies across the region to enable them to develop competitive and integrated projects will be an important element of this task.

9.2.1 INTEGRATION OF EXISTING PROJECTS

As a first step of integrating existing projects into the IRWMP, the consulting team will perform a detailed inventory of current projects that assesses the status of those projects with respect to design, permitting, environmental review, clarity of purpose and need, technical and economic feasibility, identification of performance measures, and overall readiness to implement. The analysis will also result in the identification of opportunities for integration among projects. The specific activities necessary to move each project to ready-to-implement status will be identified.

9.2.2 DEVELOPING AND INTEGRATING NEW PROJECTS

The second element of the project development process is the development of new or expanded regionally oriented projects. The creation of topic-specific and geo-specific project development groups will be used to foster collaboration. Topic-specific groups will be identified by the RWMG as IRWMP preparation proceeds. The geo-specific groups will likely be developed through the sub-regional groups identified in Task 2.1, Stakeholder Involvement during IRWMP Development. These groups will convene at regular intervals and will be facilitated by the consulting team.

Projects developed by individual members will be routed to the appropriate project development group so that projects' regional application can be evaluated and they can inform or inspire the development of other regional projects. The RWMG will be consulted regularly to acquaint them with the outcomes of the project development process. Experience elsewhere has shown that attendance at project development group meetings by non-RWMG members can serve as a recruitment tool for new IRWMP adoptees and deepens the capacity of the group to identify and develop successful projects. Thus, non-RWMG members will be encouraged to participate in this process.

A conceptual list of projects will be presented at each RWMG meeting to ensure that all members have the capacity to track and participate in the development of new projects. Additionally, the consulting team will evaluate projects to identify gaps or topics for which no projects have been proposed and will work to identify projects to fill these gaps. The program preferences and state-wide priorities listed above will also be used to identify project development gaps.

9.2.3 DEVELOP AND INITIATE STRATEGY FOR MOVING PROJECTS TO READY-TO-IMPLEMENT STATUS

The status of projects submitted for inclusion in the IRWMP will range from conceptual to ready-to-implement. As a result, a strategy for moving projects toward ready-to-implement status will help to ensure IRWMP

implementation. The consultant will work with the CC to develop a strategy for this effort. Careful attention will be paid to ensuring that project development time is not wasted by developing projects that will not ultimately be consistent with objectives, issues, and priorities.

The provision of direct technical assistance to members, organizations, and project development groups is anticipated to be an extremely important activity under this task. The disadvantaged status of the region, combined with reduced staffing at federal and state agencies, results in a significant lack of capacity within the region to perform all of the activities necessary to make an individual project ready to implement or ready to proceed. This capacity deficit is chronic and will likely remain so.

Experience has shown that achieving consistency with DWR's plan standard for project review requires a significant investment of time and resources. Therefore, it is assumed that only those projects that are demonstrably "ready to proceed" will be developed to this level of specificity. Preliminary conversations with the Planning Grant Proposal Development Committee indicate that there are a minimum of five and a maximum of ten such projects currently identified by RWMG members. Special consideration will be given to DAC projects. Only minimal assistance will be given to RWMG members who have the resources to comply with the plan standards without substantive assistance from the consulting team. The focus of the consulting team during this task will be on providing direct technical assistance to DAC community representatives and project sponsors. This assistance will likely take the form of actually generating the project materials required to achieve compliance with the plan standards. This work will include onsite interviews, data collection, and project evaluation as well as offsite preparation of the required materials.

To ensure the feasibility of these activities, the consultant will collaborate with the CC and RWMG to identify five project sponsors who will receive this focused outreach. Concurrent with this task, the consultant will prepare the DAC project development manual (Task 9.6), which will be made available throughout the region. Review factor G, Project Costs and Financing, will require the development of a detailed project work plan. Review factor H, Economic Feasibility, will require the development of a cost-benefit analysis. These two elements will require the greatest contribution of time from the consultant as DACs frequently do not have the technical expertise to prepare a work plan, budget, and cost analysis to the level required by the guidelines. The other standards are relatively easy to meet and will require minimal time investment.

9.3 PREPARE APPLICATION MATERIALS

The consulting team will prepare project application materials that will include a set of forms, templates, and tutorials to assist project sponsors in developing competitive projects. The application process will be devised in a stepped or phased manner to minimize the investment of time by project sponsors while still providing sufficient project description to enable the group to determine which projects will serve to implement the IRWMP. The project application materials will also enable RWMG members to include cost-benefit analyses and post-project monitoring activities in their project design, as well as develop data management systems, procedures, policies, and frameworks.

The materials will be made available electronically and in hard-copy form to organizations, agencies, and individuals across the region. The application materials will also support the post-project monitoring and data collection activities identified in Task 10, Plan and Project Performance, and Task 11, Data Management.

9.4 DEVELOP PROJECT REVIEW PROCESS (INCLUDING CRITERIA)

The CC will develop a project review process that includes the factors identified in the Prop 84 IRWM Grant Program Guidelines, Appendix C, Project Review Process and takes into account regional capacity. A strategy for

compliance with the guideline requirements that does not render project development infeasible will be a project planning focus.

The CC, with the support of the consulting team, will develop both a process and a set of review criteria and support materials for consideration by the RWMG. The RWMG will review and comment on the proposed process, which will then be finalized by the consulting team prior to final adoption by the RWMG.

At the close of this task, all submitted projects will be reviewed for consistency with the inclusion criteria and then appropriate projects would be ranked based on the ranking criteria.

9.5 CEQA/NEPA CONSIDERATIONS

Environmental compliance is a necessary aspect of project implementation. However, the implications of multi-stakeholder, multi-location projects and "bundling" of private and state or federal projects will require careful application of CEQA and/or NEPA, as well as funding to complete the necessary documentation. Early consultation with compliance officers within state and federal agencies, as well as legal counsel to local agencies, will be required to determine specific processes for achieving environmental compliance. For projects on private lands it will be necessary to identify a lead agency strategy to accommodate CEQA and NEPA requirements.

Further, the availability of funds to support extensive CEQA and NEPA implementation is extremely limited. Thus, environmental compliance, in addition to project engineering and design, may prove to be insurmountable obstacles for project implementation. Options for alternative funding sources to complete environmental documentation will be explored in this task.

A CEQA/NEPA compliance evaluation will be conducted and refined throughout plan preparation. The results of this evaluation will be integrated into project development activities and the IRWMP document itself.

Finally, experience in the region has shown that heritage resource considerations are critical to federal and state participation in projects and can require time-intensive and expensive compliance, again affecting feasibility.

9.6 PREPARE DAC PROJECT DEVELOPMENT MANUAL

A manual to support identification and development of IRWMP-ready projects will be created under this task. This manual will be an important element of the overall project development task because of the disadvantaged nature of the majority of communities in the Upper Pit River Watershed IRWMP region. Relying on the capacities of individual RWMG members to develop projects (and their associated materials) for subsequent IRWMP updates will not assure that any additional projects will be forthcoming. A manual would provide a framework that would guide an entity or individual RWMG member in the identification and development of projects in an effective and meaningful manner. The materials created in Task 9.3 will be included in the manual.

Table 9-1 below provides a detailed description of the components of the manual.

Table 9-1

Project Development Manual for DACs

IRWMP PLAN STANDARDS AND GENERAL GRANT REQUIREMENTS SECTION ³	
Project Development	A set of forms, checklists, templates and plainly written text to assist applicants in identification and early development of their project, including How to determine if their idea/project is consistent with IRWM preferences and priorities How to describe a project and identify its components and sequence How to identify and recruit partners How to identify the goals and objectives of the project
Work Plan	 Compendium of high scoring work plans from funded projects (DWR and other funding sources) with the reasons for the high score clearly indicated and explained Description of methods and worksheets for developing a progressively refined work plan from concept to implementation-ready Templates for use in developing and refining new work plans Workbook to ensure that all aspects of project implementation are identified (informs work plan development)
Schedule and Budget	 Excel-based templates for use in quantifying project budget and schedule Tutorials, templates, work sheets and methods for schedule and budget preparation Compendium of assumptions for use in developing the budget and schedule Compendium of high-scoring schedules and budgets from funded projects (DWR and other funding sources) with the reasons for the high score clearly indicated and explained
Economic Benefits	 Work book to support development of relevant cost-benefit and other qualitative/quantitative benefits of projects (beginning with project concept, with increasingly refined and specific data development as project evolves). Workbook for calculating the benefits of ecosystem services Qualitative benefits resulting from project implementation (templates and work sheets)
Performance Measures	 List of project-specific performance measures organized by project type A compendium of existing IRWMP implementation performance measures
Data Management, Monitoring, Reporting	 Section focused on identifying project data collection requirements, environmental and regulatory compliance elements and options, templates o use in reporting project outcomes and monitoring results (also helps inform project work plan development and budget)
CEQA/NEPA SECTION	

CEQA/NEPA SECTION

- CEQA/NEPA guidance (focus on "How to be/identify a Lead Agency")
- Direct technical support for completing basic CEQA/NEPA documents (e.g., Categorical Exemption, Negative Declaration, Mitigated Negative Declaration, Finding of No Significant Impact)

³ This document s meant to be used and reused. The format and binding method will support frequent, outdoor and field use, replacement forms will be available on the RWMG web site

TASK 10 PLAN PERFORMANCE AND MONITORING

OVERVIEW: The plan standards included in the Prop 84 IRWM Grant Program Guidelines clearly articulate the nexus between implementation of projects and implementation of the IRWMP. Therefore, compliance with the Plan Performance and Monitoring Standard will require two separate efforts: (I) identification of who monitors evaluation of IRWMP implementation and at what frequency and (2) how project-specific monitoring plans will be developed and evaluated. Therefore, this section will consider both the process by which performance is monitored, as well as development of specific procedures and processes for project-specific monitoring efforts. A key consideration while identifying the monitoring measures will be both the expense and feasibility of employing the individual monitoring efforts, as well as the overall monitoring program. The development of IRWMP implementation performance measures will include consideration of how the RWMG will monitor the performance measures, the frequency of the monitoring, and the nexus between the performance evaluation and data management.

Following completion of the subtasks described below, the consultant will complete an initial draft of the Plan Performance and Monitoring section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 10 PLAN PERFORMANCE AND MONITORING

GOALS OF TASK

- 1. Develop a reliable system for monitoring plan performance
- 2. Identify responsibility and protocol for IRWMP implementation evaluation
- 3. Develop a project-specific monitoring strategy that enable progressive refinement of project-level monitoring

KEY DELIVERABLES

- Plan- and project-level performance and monitoring protocols, procedures, systems, quality assurance, and responsibilities
- Plan performance and monitoring chapter in IRWMP

SUBTASKS

- 10.1 Collect and Evaluate Performance Measure Examples
- 10.2 Develop Initial Performance Measures and Monitoring Protocol
- 10.3 Finalize Performance Measures for Both IRWMP and Project Implementation

BUDGET

Total Funds Requested: \$5,260.00

Match: \$0

10.1 COLLECT AND EVALUATE PERFORMANCE MEASURE EXAMPLES

The consulting team will conduct a thorough assessment of performance measures developed by other RWMGs, both at the plan and the project levels. During this review, the consulting team will also interview staff of RWMGs across the state to glean input from their plan and project implementation experience. The consulting team will also interview staff from regional organizations around the state to learn about their process for establishing performance measures for specific project types. Finally, RWMG members with detailed experience in project implementation will be interviewed to add their collective experience to the evaluation.

10.2 DEVELOP INITIAL MEASURES AND MONITORING PROTOCOLS (PROJECT-SPECIFIC)

Based on a detailed review of project-specific performance measures from across the region, the CC, with assistance from the consulting team, will develop an integrated strategy for monitoring the individual and collective performance of IRWMP projects.

The initial work effort will focus on identifying a process by which project-specific monitoring measures are identified, as well as systems for gathering and interpreting project-specific performance parameters. Specifically, the project-specific monitoring plan strategy will include appropriate project development stage, a table describing monitoring standards and processes for each project, adaptive management strategies to employ during monitoring, monitoring location and frequency, and processes to ensure compliance with identified monitoring schedule.

The ability of RWMG members to adequately fund project monitoring activities, as well as their technical capacity to successfully collect, interpret, and publish project data will also be assessed.

Given the disadvantaged status of much of the region, it is likely that a standard monitoring strategy will be developed with associated templates and workbooks to support smaller and economically disadvantaged communities that would otherwise not have the resources to ensure successful project monitoring. The specific monitoring protocols and methodologies, as well as adaptive management strategies, will be developed in close consultation with the CC. This task will both inform and be informed by Task 11, Data Management. In addition, the capacity of member groups to benefit from lessons learned will be integrated into the final performance monitoring plans and strategies.

10.3 FINALIZE PERFORMANCE MEASURES FOR BOTH IRWMP AND PROJECT IMPLEMENTATION

The CC will review suggested performance measures and supporting systems. As the RWMG members will be the individuals and organizations responsible for implementing projects it is likely that these measures will be of particular interest to them. Therefore, they will be consulted early in the process. In addition, these performance measures will be a key component of Task 9, Project Development and Integration, as the capacity to quantify and qualitatively evaluate project impacts will most likely be a specific criterion for inclusion of any given project in the IRWMP. Following iterative discussions at both the CC and RWMG a final list of performance measures will be prepared.

TASK II DATA MANAGEMENT

OVERVIEW: Federal, state, and local agencies within the Upper Pit River Watershed IRWMP area have developed, and will continue to develop, a substantial amount of data characterizing the natural resources and various management issues of the region. Currently, there is no comprehensive document or database (such as a regional bibliography) to assist natural resource managers, water managers, and the general public in accessing the breadth and depth of available materials.

The data management strategy for the IRWMP will focus on two primary needs: project-level data collection and monitoring and regional data collection and dissemination.

Because of the cost and complexity of maintaining a database, or system of interlinked databases, the data management system (DMS) for the IRWMP will consist of three integrated elements: (I) the Sacramento River Watershed Program's Sacramento Watershed Information Module (SWIM), (2) a technical bibliography, and (3) project-level data collection and dissemination.

While a strategy for updating SWIM and the bibliography will be identified during the development of this IRWMP section, the actual updates of these DMS components is not part of this work plan.

The development of quality assurance protocols, as well as processes and procedures for data sharing, methodologies to ensure consistency with state databases, and data collection protocols, as appropriate, will be developed as part of this task.

Following completion of the subtasks described below, the consultant will complete an initial draft of the Data Management section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK II DATA MANAGEMENT

GOALS OF TASK

- 1. Create a user-friendly web interface (e.g., Sacramento Watershed Information Module-SWIM)
- 2. Develop a technical bibliography of available technical data
- 3. Describe the regional DMS (i.e., SWIM, technical bibliography plus, and web portal)
- 4. Ensure dissemination of project-level data

KEY DELIVERABLES

- SWIM module customized for the Upper Pit IRWM region
- Training of local stakeholders in SWIM module
- Creation of technical bibliography
- Creation of IRWMP webpage (see Task 2)
- · Process for collecting and disseminating project-level technical data
- Data management chapter in IRWMP

SUBTASKS

- 11.1 Sacramento Watershed Information Module (SWIM)
 - 11.1.1 Transfer Information to SWIM
 - 11.1.2 SWIM Training for RWMG Members
 - 11.1.3 Develop a Digital SWIM User's Manual and Training Videos
- 11.2 Technical Bibliography
- 11.3 Project-Level Data Collection and Dissemination

BUDGET

Total Funds Requested: \$23,130

Match: \$0

II.I SACRAMENTO WATERSHED INFORMATION MODULE (SWIM)

The Planning Grant Proposal Development Committee has identified the Sacramento River Watershed Program's (SRWP) Sacramento Watershed Information Module (SWIM) as one element of its data management system. SWIM is an online resource library for watershed and conservation-related data and documents. It comprises a suite of online data discovery, document management, and GIS mapping tools.

Currently held information (such as documents and data) will be uploaded, along with an abstract, to the SWIM site where its location will be tagged. The information will then be uploaded via SWIM to the California Environmental Information Catalog (CEIC) at the Resources Agency.

II.I.I TRANSFER INFORMATION TO SWIM

SRWP will develop protocols and assist in the transfer of documents, data, and GIS information into SWIM. The data transfer protocol will establish methods for naming, organizing, attributing, establishing distribution permissions, and transferring files to SWIM. SRWP will develop a spreadsheet template that RWMG members can use to expedite the process of attributing and submitting their documents.

Most of the original data and documents will be hosted on the SWIM website. However, some proprietary data collected under private funding, or as requested by RWMG members, may appear in SWIM in abstract form only. In these cases, SWIM will provide contact information for the source entity.

GIS data needs proper spatial referencing and accurate source metadata before it can be integrated into the existing SWIM GIS system. SRWP GIS consultants will work with the CC and the consulting team to ensure that GIS data is properly projected and adequately documented. GIS data will be integrated by SRWP into the SWIM Digital Atlas.

11.1.2 SWIM TRAINING FOR RWMG MEMBERS

SWIM can be extremely useful in facilitating coordination among various organizations, as it provides a place for multiple entities to map their projects and post documents and data. To encourage individuals to upload information to SWIM, thereby increasing its overall utility and its direct usefulness to the Upper Pit River Watershed Region, SRWP will develop and present training sessions to teach RWMG members how to utilize SWIM. The training sessions will be an hour long and will include presentation of the mapping and document management tools, as well as the online GIS "MapMaker" program and the "Geofinder" data discovery application. SRWP representatives will also provide individualized training sessions to assist RWMG members in setting up user accounts and ensuring they access to, and understanding of, the SWIM site.

II.I.3 DEVELOP A DIGITAL SWIM USER'S MANUAL AND TRAINING VIDEOS

SRWP will develop a web-based user's manual that describes the capabilities of SWIM's document management, data discovery, and mapping tools. Accompanying video tutorials (screenshots and voiceover) will improve upon several draft videos currently on the SRWP websites and will provide step-by-step instruction on key functions including: (I) How to make and export a GIS map as a PDF using the SWIM Digital Atlas; (2) Extracting GIS data from the Digital Atlas for use in outside GIS programs; (3) Using the SWIM Geofinder to search for documents and data; (4) Creating a new record in the SWIM document library; (5) Importing outside GIS data into SWIM's Digital Atlas, and; (6) Browsing SWIM document using the Digital Atlas.

11.2 TECHNICAL BIBLIOGRAPHY

The second element of the Upper Pit River Watershed IRWMP's DMS is the technical bibliography.

This will, in essence, be a compendium that will show the basic information about the data, such as document title, authors, date, and location of document, and a brief discussion where appropriate.

While SWIM will provide a unique and user-friendly method for accessing a wide variety of data, it may not be the most appropriate vehicle for managing information that is highly technical, suitable for upload into state-maintained databases, or extensive field and/or project-specific data sets. In some cases, access to the data needs to be closely managed to ensure confidentiality, and in others, raw data will need to be interpreted before it is useful.

The data collected during IRWMP development will be included in the regional technical bibliography. Emphasis will be placed on making updates to this bibliography as streamlined and low-cost as possible. As previously stated, the actual update of this bibliography is not included in this work plan, but will be a future activity of the RWMG.

11.3 PROJECT-LEVEL DATA COLLECTION AND DISSEMINATION

This task will result in a description of the existing data collection techniques based on recently implemented projects across the region and will identify strategies for ensuring that future data collection efforts generate data suitable for inclusion in state databases where relevant and which meet state guidelines for defining collection techniques and data sharing strategies.

Each IRWMP project that is implemented will include development of a project-specific webpage on the updated PRWA website. At minimum, this webpage will identify the project sponsor, provide the technical scope of work by which the project was accomplished, provide access to updated monitoring data and outcomes, and list the project performance measures. The creation of the project-specific webpage, and the process of uploading the project data, is included in Task 2.1.6.

TASK 12 FINANCE

OVERVIEW: Experience elsewhere in the state has shown that the bond funding available through the IRWM Program is not sufficient to support ongoing IRWM Plan and project implementation activities. For this reason, development of a long term revenue program is essential to ensuring sustained and durable IRWMP implementation.

Given the current economic climate, utilizing rate payer fees, increased operating funds, special taxes and assessments or local bonds are problematic, in this already disadvantaged region. Therefore, the preparation of this section will be difficult for RWMG members and the CC and will likely be a time-intensive effort occurring for the duration of the planning process.

Following completion of the subtasks described below, the consultant will complete an initial draft of the Finance section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 12 FINANCE

GOAL OF TASK

Identify a long-term and sustainable financing and revenue strategy for IRWMP implementation

KEY DELIVERABLES

- Ongoing update of available funding sources
- RWMG-directed fundraising assistance to targeted DACs
- Long-term revenue plan, including IRWMP programs and projects
- Finance chapter in IRWMP

SUBTASKS

- 12.1 Research Available Funding Sources
- 12.2 Develop Long-Term Revenue Plan

BUDGET

Total Funds Requested: \$11,520.00

Match: \$0

12.1 RESEARCH AVAILABLE FUNDING SOURCES (FOUNDATION, STATE, FEDERAL, CORPORATE)

The consulting team will undertake a systematic research effort to identify a diverse range of available funding sources. This research effort will include a thorough Internet search of grant programs administered by

foundations, state and federal programs/agencies, and corporations. Potentially suitable grant sources, regardless of their nature, will be collated and organized by issue or program preference. Due dates and eligibility and match requirements will also be identified. The Sierra Nevada Conservancy currently has an extensive compendium of available funding sources. This database will also be evaluated to identify potential funding sources. This research will be updated quarterly during the IRWMP development process.

The consulting team will conduct quarterly day-long workshops open to all RWMG members to assist them in pursuing funding for their organizations and projects.

12.2 DEVELOP LONG-TERM REVENUE PLAN

The information gathered in the previous task will be utilized to develop a long term revenue plan, which will include strategies at both the IRWMP and project level. In addition, RWMG members, federal and state agencies, philanthropic foundation staff, and experts in both program and project-level fundraising will be consulted as part of this task.

While grant-based funding sources will be an important element of alternative funding considerations, other sources will be explored, such as the inclusion of regional coordination tasks in members' grant applications to support IRWMP activities. Additional items for consideration may include private loans, local bonds, or other similar strategies; however, the disadvantaged nature of the region will likely substantially narrow available options. Finally, a table addressing the certainty of funding (Table 5-IRWM Plan Financing Example, p. 59 of IRWM Plan Standards) will be completed. Once the long term revenue plan is drafted, it will be submitted to the CC for review and comment. This document will be the basis for the narrative IRWMP section, following its review and approval by the RWMG.

A critical factor for the region in pursuing both IRWMP and project implementation funds is the extremely limited technical and financial resources of the various RWMG members. Based on selection criteria developed by the RWMG, targeted technical support to selected members will include training in grant preparation, training in work plan and budget development, assistance with assessing project compatibility with funding guidelines, strategies for integrating multiple projects into a single application, and other associated skills and capabilities.

TASK 13 IMPACTS & BENEFITS

OVERVIEW: Successful implementation of the IRWMP document and associated projects will result in a wide range of impacts and benefits. These impacts and benefits can occur on many levels, both inside and between IRWM regions. Additionally, the uncertainty of the actual magnitude of benefits or impacts can vary considerably through time and between projects and implementation efforts.

The impacts and benefits of individual projects are considerably less difficult to anticipate than those associated with overall plan implementation. The design of projects will specifically include an assessment of likely impacts and benefits and projects will be designed to ensure that the articulated benefits are met and that predicted impacts are avoided to the maximum extent possible. The performance measures developed in Task 10 will be specifically structured to minimize negative project impacts.

Thus, the project-specific impact and benefit section will be largely quantitative and based on the performance measures evaluation. The plan implementation level assessment will be more qualitative in nature and will rely on a cumulative assessment of predictable impacts and benefits.

Following completion of the subtasks described below, the consultant will complete an initial draft of the Impacts and Benefits section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 13 IMPACTS AND BENEFITS

GOALS OF TASK

- I. Document potential impacts and benefits of IRWMP implementation, and to the extent feasible, identify project-level impacts and benefits
- 2. Extrapolate benefits to an interregional level

KEY DELIVERABLES

- Table presenting impacts and benefits, both regional and interregional
- Specific strategy for updating impacts and benefits section
- Integration of plan standard project types into Task 9
- Impacts and benefits section in IRWMP

SUBTASKS

- 13.1 Evaluate Impacts and Benefits Sections of Other IRWMPs
- 13.2 Identify Impacts and Benefits of Plan Implementation

BUDGET

Total Funds Requested: \$5,320.00

Match: \$0

13.1 EVALUATE IMPACTS AND BENEFITS SECTIONS OF OTHER IRWMPS

The impacts and benefits sections of IRWMPs across the state will be evaluated to glean techniques, methods, strategies, templates, quantitative and qualitative measurements, and other elements of assessment. These data will inform the subsequent task.

13.2 IDENTIFY IMPACTS AND BENEFITS OF PLAN IMPLEMENTATION

The CC, in collaboration with the consulting team, will develop a set of assessment criteria to evaluate plan impacts and benefits. As stated in the previous task, the assessment of plan-level impacts and benefits will necessarily be more subjective and less quantifiable, and project-specific impact and benefit section will be largely quantitative and based on the performance measures evaluation. Methods for ensuring regular plan updates to provide more specific project-level impact and benefit analyses will also be included in this portion of the work effort.

The impacts and benefits section will be organized along programmatic lines and will include a simple presentation of both potential impacts and potential benefits and the project and plan level. The IRWM Plan Standards Program Description (p. 52-55), will be specifically addresses in the project development activities already described in Task 9.

TASK 14 TECHNICAL ANALYSIS

OVERVIEW: The existing watershed management documents already prepared in the region contain extensive bibliographies. In addition, data collection for Task 3, Region Description, Task 4, Water Issues and Conflicts, and Task 7, Climate Change, will result in the collection of additional data. While there are literally hundreds of documents that will be utilized during plan preparation, not all of these documents will be primary sources for determining the water management needs in the plan area. Creating a technically accurate abstract of every single document utilized in plan preparation will not be feasible. Instead, effort will be put into identifying the most

important documents and creating technical descriptions for that select set of data. The CC or a designated TAC will be consulted to determine which data is most relevant to plan preparation and therefore needs to be included in the Technical Analysis section.

Following completion of the subtasks described below, the consultant will complete an initial draft of the Technical Analysis section. The section will then follow the review and finalization process described in the introduction to the work plan (p. 10) and Task 16, Prepare IRWMP Document.

TASK 14 TECHNICAL ANALYSIS

GOALS OF TASK

- 1. Ensure that plan chapters are based on sound technical information, analyses, and methods
- 2. Enable stakeholders to readily understand the sources of key information referenced in the plan

KEY DELIVERABLES

Preparation of technical analysis table per IRWM Plan Standards Table 6 (p. 60)

14.1 COLLATE AND EVALUATE NEW DATA SOURCES

Technical analysis chapter in IRWMP

SUBTASKS

14.1 Collate and Evaluate New Data Sources

BUDGET

Total Funds Requested: \$5,320.00

Match: \$0

During the data collection activities associated with the previous tasks, a wide variety of data will be collected by the CC, TACs, the RWMG, and the consulting team. Wherever possible, data will be collected in its electronic form. If data exists only as a hard copy, the cover and title page, as well as any summary or abstract pages, will be copied. In this way, a library will be constructed that includes all of the technical data gathered for this project. This data, in turn, will be utilized for Task II, Data Management.

CC members, Vestra, and the consulting team will collaborate to evaluate the relevance of the various data and identify the data that will serve as a key information source for document preparation. Table 6 in the Prop 84 IRWM Program Grant Guidelines will be used as a basis for conveying this information.

TASK 15 IRWMP IMPLEMENTATION

OVERVIEW: Perhaps the most important aspect of plan implementation will be the establishment of a governance structure by which decisions and collective actions that support overall plan implementation can be accomplished. Based on experiences elsewhere in the state, it appears likely that the Upper Pit River RWMG will be looking at the MOU-based governance strategy while considering the formation of a non-profit organization and/or joint powers agreement to facilitate fundraising and implementation. The IRWMP will clearly state how the document implementation will be managed and project implementation achieved.

Plan implementation consists of two separate elements: I) Ongoing monitoring and update of the plan objectives and outcomes; 2) Developing structures to ensure project-level funding and appropriate monitoring and evaluation of project outcomes. Finally, the process, timing, funding, and approach to regular plan updates will need to be articulated.

TASK 15 IRWMP IMPLEMENTATION

GOALS OF TASK

- 1. Identify governance structure to support IRWMP implementation
- 2. Develop processes to ensure long-term plan implementation and regular plan updates
- 3. Prepare an implementation guide to assist in ensuring critical plan recommendations are implemented

KEY DELIVERABLES

- Governance structure
- Draft list of implementation strategies
- Process and methodologies for updating plan
- Implementation Guide
- IRWMP implementation chapter in IRWMP

SUBTASKS

- 15.1 Governance During IRWMP Implementation
- 15.2 Define Long-Term Implementation Strategies
- 15.3 Define Process for Updating IRWMP
- 15.4 Develop Implementation Guide

BUDGET

Total Funds Requested: \$1,920

Match: \$10,200

Match Source: Consultant

15.1 GOVERNANCE DURING IRWMP IMPLEMENTATION

During the course of IRWMP preparation, the RWMG will discuss a variety of long-term governance structures to support both Plan and project implementation. Other IRWMPs across the state have utilized some or all of the following long-term governance structures: memorandum of understanding-based organization, creation of a non-profit corporation, and development of a joint powers authority/agreement (JPA). A synopsis document describing the potential advantages and disadvantages of these different structures will be provided to the RWMG to assist deliberations. Emphasis will be placed on adopting a governance structure that enables maximum participation and representation of the region's stakeholders, as well as a structure that provides maximum flexibility for seeking and managing project-related funding and accomplishments. The IRWMP implementation governance structure will be included in the IRWMP.

15.2 DEFINE LONG-TERM IMPLEMENTATION STRATEGIES

IRWMP implementation consists of two primary elements, plan implementation and project implementation. Plan implementation requires that the RWMG regularly assesses its own success at implementing the plan, determine criteria for assessing plan implementation, regularly evaluate the ongoing relevance of objectives and measurement of those objectives, and other similar activities. Project implementation requires the capacity to negotiate contracts, develop budgets and scopes of work, manage consultants, indemnify the RWMG and project sponsors, ensure compliance with labor codes, and other project management activities.

These two responsibilities are different in nature, therefore strategies, methods, policies, and procedures that serve ongoing IRWMP implementation may be different than those used for project-specific implementation activities.

The outcome of this task will be a draft list of implementation strategies for review by RWMG. These strategies will then be included in the IRWMP.

15.3 DEFINE PROCESS FOR UPDATING IRWMP

In order for an IRWMP to remain a working, flexible, and living document, it must undergo periodic updates. The RWMG will identify a process for updating the Plan that includes a timeline establishing the frequency or trigger points at which the document will be updated and the general process for this update. The outcome of this task will be the identification of a specific process and methodology for updating the plan. This information will be included in the IRWMP.

15.4 DEVELOP IMPLEMENTATION GUIDE

IRWMP implementation comprises the following elements: implementation of governance structures; ongoing coordination between RWMG members; regular IRWMP updates, particularly in response to the project development process; ongoing assessment of the measurable objectives; development of projects by individual members and topically or regionally oriented work groups; evaluation of plan and project performance measures; regular updates to the DMS; ongoing pursuit of organizational and project funding; regular assessment of plan and project impacts and benefits; and administration of received funds. Specific process, strategies, and methods for accomplishing this myriad of diverse activities will be articulated within each individual IRWMP section. However, the mechanics of actually implementing the various aspects of the IRWMP will need to be devised, to provide a predictable and reliable method to monitor and evaluate success.

This task, developed in close coordination with the CC and the RWMG will provide a calendar-based, checklist-style handbook for use by the organization to guide implementation and plan evaluation efforts once the plan has been completed and adopted. Because of the uncertainty of long-term funding for the organization, the ability of the RWMG to effectively implement the IRWMP will depend on the process being streamlined, readily understandable and consistently affordable. The implementation plan will be designed with all of these factors in mind.

TASK 16 PREPARE IRWMP DOCUMENT

OVERVIEW: The work task sequence has purposely been arranged in such a way that each IRWMP section is drafted and reviewed by the CC and/or the RWMG as it is completed. Therefore, at the end of the chapter creation process, it will be necessary to merge these finalized chapters into a single document. This document would include all graphics, figures, tables, charts, appendices, and other necessary components. Additionally, a checklist identifying the requirements of each plan standard will be provided at this stage to ensure that all of the RWMG members and/or the CC-designated review team will be able to assess the consistency of the document with the plan standards. Upon completion of the final review cycle, the document will be returned to the RWMG for final review and adoption of the plan by the RWMG group. This adoption will initiate a member-by-member adoption process will also include confirmation of and a memorandum of understanding detailing the proposed governance structure to direct ongoing IRWMP implementation.

TASK 16 PREPARE IRWMP DOCUMENT

GOAL OF TASK

Preparation of IRWMP that is fully compliant with IRWM Plan Standards

KEY DELIVERABLES

- Review draft document
- Review final document
- Final document posted on web portal, distributed in printed form, and available on CD at libraries across the region
- Adoption of IRWMP by RWMG

SUBTASKS

16.1 Prepare IRWMP Document

16.2 Adopt IRWMP and Amended MOU

BUDGET

Total Funds Requested: \$52,340

Match: \$0

16.1 PREPARE IRWMP DOCUMENT

The consulting team will prepare all IRWMP sections and appendices under the direction of the RWMG. Each of the tasks in this work plan will provide critical content in the final IRWMP.

As stated previously, draft IRWMP sections will be completed and reviewed as a part of the work plan tasks. Once all of the tasks have been completed, the assembled document will be forwarded to the RWMG in discreet segments to reduce overwhelm and to ensure that the group is given the opportunity to review sections in a coherent but sequential manner. A completed IRWMP document will be prepared once the review cycle is complete. The consulting team will provide graphics, maps, and figures for use in the document. This final version will be forwarded to the RWMG for adoption.

16.2 ADOPT IRWMP AND AMENDED MOU

The CC and consulting team will assist the RWMG in reaching consensus on and adopting as many of the IRWMP chapters as possible at the final scheduled RWMG meeting. If consensus cannot be reached on particular chapters, the RWMG will use the implementation guide developed in Task 15.4 to achieve final consensus and adoption of the IRWMP. Once the RWMG has formally adopted the plan it will be necessary for all RWMG member organizations and agencies to formally adopt the IRWMP, thereby ensuring their capacity to continue to propose projects for inclusion in the plan.

The current PRWA MOU does not formally refer to DWR's Integrated Regional Water Management Program or the Regional Water Management Group. Therefore, the existing MOU will need to be amended to include specific language referencing the IRWM process, as well as the acknowledgement of the PRWA as the RWMG. Adoption of the IRWMP will also include adoption of an amended MOU for submittal to all RWMG members to ratify at the same time that they adopt the IRWMP. In this way, at minimum, the MOU structure that has served the region so well will continue to provide the organizational structure in addition to, if necessary, a non-profit or JPA governance structure.

A single amended MOU will be submitted for adoption at the end of the process thereby eliminating the bureaucratic costs of multiple revisions to the MOU during plan preparation. To ensure that all RWMG members are formal and willing participants in development of the plan, a letter of commitment will be prepared and submitted to each organization for their formal review and approval in the opening months of IRWMP development.